Land Records and
Agriculture, Assam,
report
1889-90 to 1896-97

00132915

BOMBAY BRANCH
OF THE
ROYAL ASIATIC SOCIETY.
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ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

for 1889-90.

132915

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By H. Z. DARRAH, Esq., C.S.,
DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM.

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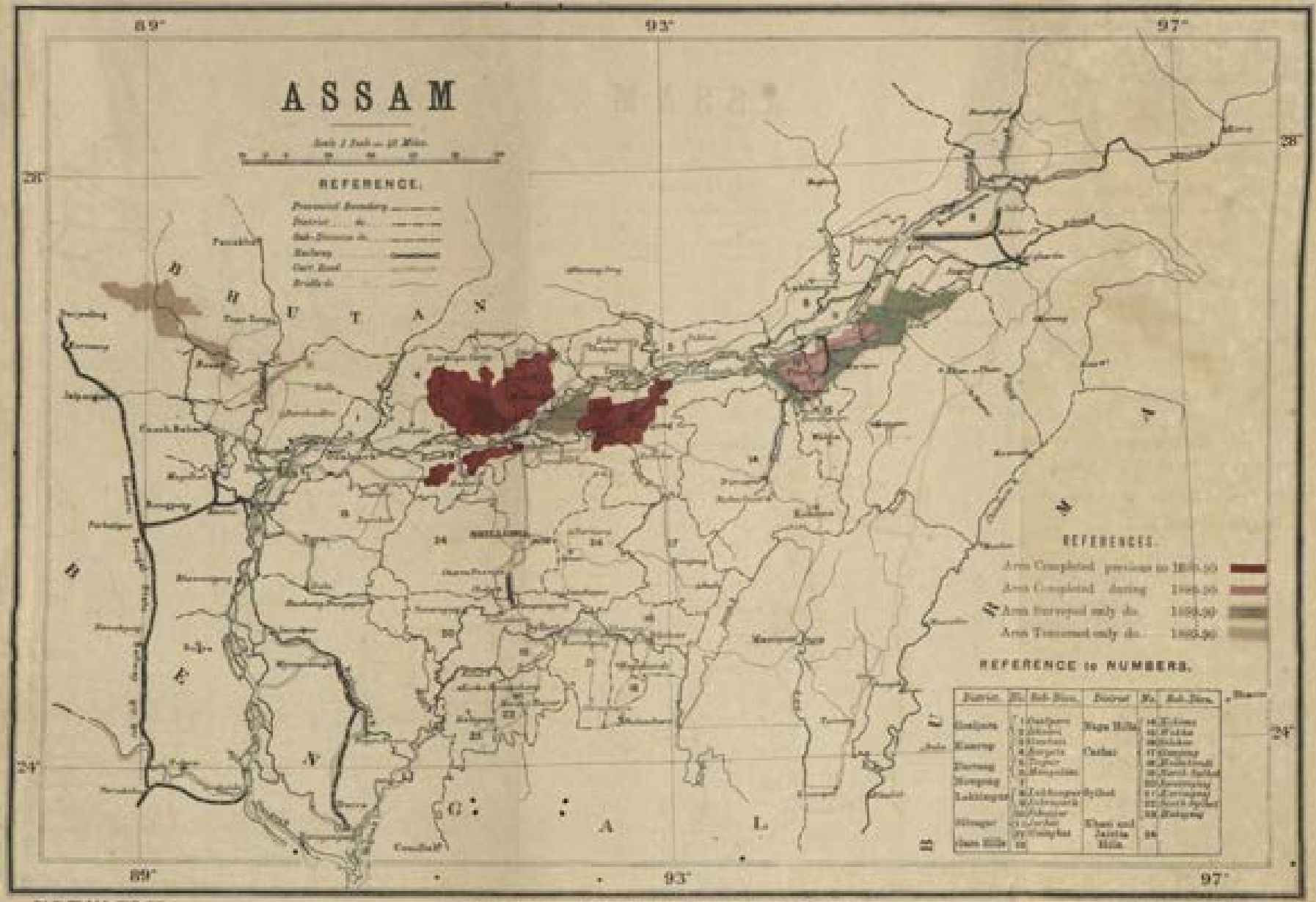
MAP TO ILLUSTRATE CADASTRAL SURVEY IN ASSAM



Published under the direction of Colonel S. G. Thuillier, R.E., Surveyor General of India,
April 1859.

ANNUAL REPORT OF THE DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM, FOR 1889-90.

No. 1,247, dated Shillong, the 1st July 1890.

From—H. Z. DARRAH, ESQ., C.S., Director, Department of Land Records and Agriculture, Assam,

To—The Secretary to the Chief Commissioner of Assam.

SIR,

I HAVE the honour to forward herewith the Seventh Annual Report, describing the operations of this Department during the year ending the 31st of March 1890. The report has been compressed into the smallest possible compass compatible with giving an intelligible account of the work done.

Touring.

2. On the 1st of April 1889, I was in the Barpeta sub-division, inspecting a part I had not seen before, with a view to future surveys. On the 9th and 10th, I held the usual survey examination for first-class certificates at Gauháti, and on the 11th returned to head-quarters at Shillong. On the 6th of July, I went on privilege leave, which expired on the 29th of September. On the 6th of November, I went into camp, and, after holding another survey examination for first-class certificates at Gauháti on the 11th and 12th of that month, I started for Rowha, in the Barpeta sub-division, where I arrived on the 19th of November. I remained in the sub-division till the middle of January, seeing the survey experiment prescribed by Mr. (now Sir Dennis) Fitzpatrick properly started. On the 19th of January I left the Province under the orders of the Chief Commissioner to make certain enquiries in Burma. I was deputed in consequence of a suggestion made by the Government of India in letter No. $\frac{42}{61}\frac{1}{6}$S., dated the 11th October 1889, from the Secretary in the Revenue and Agricultural Department. I returned to Assam on the 22nd of February, and, after a few days in Gauháti, went to Nowgong, and arranged for a re-distribution of the mandals' circles on the basis of a reduction in the number. On the 17th of March I reached Jorhát, where I inspected the settlement office, and redistributed the mandals' circles in the area cadastrally surveyed in the previous year. I then went to Mangaldai, which I reached on the 25th. There also it was found possible to make a considerable reduction in the numbers of the mandals, and with the aid of the Sub-divisional Officer this was done, and new circles formed. A few days after I reached Gauháti, redistributed the mandals' circles in the cadastrally surveyed area, and on the 31st crossed over to Barpeta with a view to testing the results of the experimental survey. Altogether, out of 266 days, I was on tour for 156 days. During my absence on leave Mr. R. S. Greenshields, C.S., officiated for me.

Head-quarters work.

3. During the year the following reports were issued:—

(1) Annual Departmental Report.
(2) Annual Inter-district Trade Report.
(3) Annual River-borne Trade Report.
(4) Annual Settlement Report.

In addition, Mr. Greenshields wrote the Annual Revenue Administration Report for the Province. That portion of the revenue work of the Secretariat which relates to the Brahmaputra Valley also passed through my hands and was, while I was on leave, dealt with by Mr. Greenshields.

4. The statement below gives the dates on which the sections of the annual district reports due to this office on the 1st May arrived at head-quarters :—

District annual reports.

From G. E. McLeod, Esq., Deputy-Commissioner, Nowgong, on 25th April 1890.
" Major H. St. P. Maxwell, ditto, Khási and Jaintia Hills, on 30th April 1890.
" G. Godfrey, Esq., C.S., ditto, Goálpára, on 1st May 1890.
" R. S. Greenshields, Esq., C.S., ditto, Darrang, " 3rd ditto.
" J. D. Anderson, Esq., C.S., ditto, Cachar, ditto.
" R. B. McCabe, Esq., C.S., ditto, Lakhimpur, on 5th ditto.
" J. Kennedy, Esq., C.S., ditto, Sylhet, on 7th ditto.
" Knox Wight, Esq., C.S., ditto, Sibságar, on 8th ditto.
" A. C. Campbell, Esq., ditto, Kámrúp, " 14th ditto.
" Major M. A. Gray, ditto, Gáro Hills, on 27th ditto.
" A. Porteous, Esq., C.S., ditto, Nágá " " 6th June 1890.

5. The following paragraphs deal with the headings prescribed by the Government of India in Circular No. 45R., dated the 28th of April 1884.

Divisions of report.

I.—Organisation and Maintenance of Village Records.

A.—Field-books, Rent-rolls, and Leases.

(*a*) *Mauzas cadastrally surveyed.*

6. The area in Nowgong cadastrally surveyed in 1887-88 (586·59 square miles) was settled during the year on the results of the survey, making the total surveyed area in the Province amount to 2,308·00 square miles. The Nowgong mauzas were distributed amongst four supervisor kanungos in the manner indicated in the statement below :—

Net area surveyed.

(1)	The Dhing Circle	Dhing. Mikirbheta. Charaibahi.	143·77 square miles.
(2)	Sahori Circle	Dandua. Bara Pujia. Sahari. Balgaon. Jagialgaon. Jarabari.	161·41 "
(3)	Nij Sahar Circle	Hatichang. Kathiatoli. Kampur. Kandali. Pakhimoria. Singia Potoni. Nij Sahar. Gomothagaon. Kachamari.	164·21 "
(4)	Silghát Circle	Pubthoria. Barbhagia. Juria. Bhelaugari. Khatoalgaon. Chapanala. Chalchali.	117·20 "

The re-distribution was made early in the year, but the list represents the final results arrived at after some changes proposed by the Deputy-Commissioner had been effected.

7. The Sub-Deputy-Collectors in charge were Babu Chandra Kanta Sen in Kámrúp, Babu Phanidhar Chaliha in Mangaldai, and Babu Sarat Chandra Mazumdar in Nowgong. The following statements show the character of the work done by each of these Sub-Deputy-Collectors and the time spent upon each part of their duties.

Sub-Deputy-Collectors.

Statement showing work done by Sub-Deputy-Collectors in Cadastrally Surveyed Tracts.

Name of Sub-Deputy Collector.	Number of mandals		Number of cadastral kattangas whose work was inspected.	Number of villages tested.	Testing by check lines.							Testing without check lines.		Number of mounds erected or trees planted.	Number of case enquiries disposed of.
	Whose papers examined.	Whose field-work tested.			Number of lines run.	Number of lines in which errors were found.	Number of cases in which re-survey was ordered.	Length of lines.	Number of halants.	Number of offsets.	Number of fields tested.	Area including jungle.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Babu Chandra Kanta Sen	228*	103	15†	141	260	121	67	81 miles and 16·94 chains.	2101	2,114	722	3,928 bighas.		25	442
Phanidhar Chaliha	88	6	1	..	8	6	1	2·16 miles.	94	151	..	.....		..	..
Sarat Chandra Mazumdar	60		3	..	33	28	2	12·78 miles.	852	813	..	.....		..	..

* Tested papers of 187 mandals in Kámrup, 23 ditto Mangaldai, and 9 ditto Nowgong.

† Tested work of 10 kanungoes in Kámrup, 3 ditto Mangaldai, and 2 ditto Nowgong.

Diary Statement for Sub-Deputy-Collectors.

Name of Sub-Deputy-Collector.	Number of days on tour.						Number of days doing office work.	Number of days without work.						Number of days at Sibsagar on work not included in above	Grand Total.
	Running check lines.	Testing crops.	Examining mandals' papers.	Enquiring into cases.	Total camping in sub-division.			Travelling from place to place.	Gazetted holidays.	On leave.		Total without work.			
										Privilege.	Without pay.	Half-pay.			
Babu Chandra Kanta Sen	164	..	20	9	193		54*	15	29	81	..	..	62	662	365
,, Phanidhar Chaliha	6	..	2	..	8		107	9	30	..	..	78	117	132‡	365
,, Sarat Chandra Mazumdar	33	1	9	43	81		161	21	69§	29	..	..	100	24	365

* Examination of mandals' papers (36) and preparation of correction slips, &c., in connection with revision survey of Gauháti (18 days).
† Casual leave for ill-health.
‡ Conducting Survey class I Examination (17); to meet Director of Land Records and Deputy-Commissioner (7); Vernacular translation of mandals' Rules; collection of materials for fish and fish-drive report, &c. (42).
§ At Jorhát with the Cadastral Survey party (113); testing measurements in non cadastral mauzas (17); testing survey of *nisf-bhiroj* estate (3).
‖ Includes 49 Sundays.

Individual work.

8. Babu Chandra Kanta worked well. The map that accompanies his annual report shows that no part of the area under his charge was left unvisited. He examined the papers of 187 out of 196 mandals of his district, and tested the field work of 103. His mileage of chain lines run is very high. From the 6th to the 20th of March he was absent in Mangaldai and Nowgong. He was 169 days on tour, but for 39 days at head-quarters he was engaged in revising the survey of the town of Gauháti, which was practically field-work. One specially useful piece of work carried out by the Sub-Deputy-Collector was the erection of mounds, marked on the maps, in localities where the cultivation was difficult to survey. These will prove of the greatest use where changes are frequent.

Babu Phanidhar Chaliha was absent from his sub-division from the 28th September to the 12th February, while on deputation at Jorhát, where he had been sent to acquire a knowledge of practical survey in the field by working as an amín with the professional survey party. He was also on leave for 78 days on medical certificate. As a natural result, he was unable to do much testing of measurements or touring in his sub-division. Babu Sarat Chandra Mazumdar was on tour, doing testing and case work for 81 days, which is less touring than is expected from a Sub-Deputy-Collector. He inspected the work of only 60 out of 121 mandals, and ran only 12·78 miles of check lines. The small mileage of check lines was due to the late date at which the mandals received the fair copies of the papers from the settlement office, as this caused much delay in the correction of the maps. Owing to the same fact the Sub-Deputy-Collector had to confine his attention to the mandals of the area in which the cultivation was most fluctuating. The map which accompanied the Sub-Deputy-Collector's report shows that his inspecting visits were fairly well scattered over the area in his charge. The important mauza of Jágialguon, however, appears to have escaped inspection. The Deputy-Commissioner explains that this was due to the small amount of new land there taken up.

Weekly statements.

9. The diaries of all Sub-Deputy-Collectors of the cadastrally surveyed area come to me weekly for inspection. A consolidated weekly statement showing the work done by the mandals of the same area is also forwarded to me regularly, together with the orders passed by the Deputy Commissioner on the character of the week's work in each district.

Local inspections.

10. Owing to the special work I was engaged on in Barpeta and my subsequent visit to Burma, I was unable to do any field inspection in Nowgong and Mangaldai. In March, when I visited the former district, I examined the papers of all the mandals but one, and, as usual, recorded the results of my examination in an inspection note, which was forwarded to the Deputy-Commissioner. Considering the late date at which the faired papers from the survey office had been received in the district, the work was on the whole creditable. The great defect was the neglect with which the theodolite stations had been in many cases treated. The special attention of the Deputy-Commissioner was called to this. In Mangaldai I specially enquired into the working of the new rules. This, on the whole, had been satisfactory.

The new rules.

11. The revised rules for the maintenance of settlement papers in cadastrally-surveyed mauzas were introduced in 1889 into Kámrúp and Mangaldai. They were drafted for the purpose of reducing the work of each mandal, and the principal change introduced was the division of the *dág chitta* into three parts to correspond with the *jamabandi*. Babu Chandra Kanta, Sub-Deputy-Collector, who took the greatest pains with the elaboration of these rules, and whose services in this connection were noticed in paragraph 11 of last year's report, was deputed for a short time to Mangaldai to explain to the kanungos and mandals the manner in which they were to be worked. This was necessitated by the fact that, though the principal changes to be effected had been resolved on before the close of 1888-89, the rules were not finally printed in vernacular till November 1889. The Sub-Deputy-Collector worked the rules very efficiently in Kámrúp, and it was found by actual experience that the saving of labour involved by them was very real indeed. The result was that it was possible to carry into effect the reductions described in the next paragraph. Much credit is due to Babu Chandra Kanta Sen for his share in bringing about so considerable a saving.

Reductions.

12. In March, when I visited Nowgong, the mandals' circles were re-distributed, and it was found possible to dispense with the services of 28 men out of 121. At the same time it was arranged that the new rules were to be introduced from April 1st 1890, and Babu Chandra Kanta was, with the permission of the Deputy-Commissioner, Kámrúp, sent to Nowgong to supervise the division of the *dág chitta* into three parts. In Sibságar, the mandals' circles were re-distributed over the area cadastrally surveyed in 1888-89, and as the new rules were to be introduced, and the *dág chittas* had each been divided into three by the settlement office, before being copied for the district authorities, it was found possible to reduce the total number of mandals from 113 to 92. In Mangaldai, where the cultivation surveyed is very permanent, and the new rules had been at work for a year, it was found possible to part with 34 mandals out of 98.

In Kámrúp, where I arrived at the close of the month, a reduction of 21 in 196 was made.

The statement below gives concisely the results of the changes above described:—

District.	Old number before April 1st, 1890.	Present number after April 1st, 1890.	Reduction.	Monthly saving.	Annual saving.
				Rs.	Rs.
Kámrúp	196	175	21	126	1,512
Darrang	98	64	34	204	2,448
Nowgong	121	93	28	168	2,016
Sibságar	113	92*	21	126	1,512*
Total	528	424	104	624	7,488

* In Sibságar the reduction was not carried into effect until the 1st of July.

Raising pay of mandals.

13. A scheme has since been submitted to the Chief Commissioner with a view to utilizing most of these savings by raising the pay of the first and second grade from Rs. 10 and 9 a month to Rs. 12 and 9. It is also proposed to use a part of the savings in providing better furniture for the use of the mandals when engaged in work upon their maps, and zinc tubes for the maps in the record rooms.

Work of supervisor kanungos.

14. The statement below gives in a succinct form details as to the work done during the year by the supervisor kanungos.

District	Name of kanungo.	Total area of circle in square miles.	Number of days.			Length of check lines run in linear miles.	Per mile of check line.			Area of concealed cultivation discovered.
			On tour.	At office.	No work.		Area of fields touched.	Number of fields touched.	Number of kattas and offsets.	
1	2	3	4	5	6	7	8	9	10	11
							Acres.			Acres.
Kámrúp...	Ganga Ram Das	195·34	197	125	43	20·11	72·60	30·88	61·66	48·77
„ ...	Nitya Nanda.....	28·93	82	132	151	3·75	21·33	24·00	62·93	...
„ ...	Durga Ram Dutta.....	127·75	166	109	68	27·69	30·91	36·14	68·79	...
„ ...	Dino Nath Neogi	103·27	103	241	21	43·21	79·86	94·81	64·79	·62
„ ...	Mohesvar Das	125·19	135	152	75	25·12	135·23	175·27	46·01	2·08
„ ...	Lagnoo Ram Das	112·60	127	182	56	68·51	113·34	25·87	41·59	...
„ ...	Nanda Kumar Saha.....	133·29	146	82	92	31·01	13·51	19·05	37·50	...
„ ...	Pua Ram Mohunta	124·63	172	84	109	51·11	76·50	45·45	28·83	7·58
„ ...	Dhirsing	96·14	52	168	86	21·16	38·42	38·56	47·49	·57
„ ...	Mina Ram.....	127·25	97	139	83	25·25	111·17	41·26	68·15	·65
Darrang...	Chandra Kanta Sarkar	198·00	142	156	67	20·77	36·59	43·81	55·55	...
„ ...	Lakshi Kanta	150·98	97	92	18	3·07	49·51	93·16	93·81	...
„ ...	Basir Ali	198·04	199	134	32	5·43	86·02	31·30	40·69	...
Nowgong .	Sisu Ram Chaudhury	56·04	130	149	45	23·20	254·91	245·94	56·76	3·07
„ ...	Joy Ram Das	47·95	161	114	46	34·32	26·26	26·28	40·23	8·50
„ ...	Ram Rath Dutta	117·20	174	82	50	15·32	50·91	74·41	84·59	3·96
„ ...	Lakshi Ram	145·40	177	112	30	59·58	155·00	50·90	58·77	21·46

Character of the work.

15. Lagnoo Ram Das, Dino Nath Neogi, and Pua Ram Mohant of Kámrúp and Lakhi Ram of Nowgong did the most in the matter of running check lines. They all had difficult circles to deal with, containing much fluctuating cultivation. Nytia Nanda was away on sick leave for over three months. Pua Ram, Dhir Singh, and Nanda Kumar obtained leave within the period during which leave is expressly forbidden by the Rules of 1889, the first named being absent for no less than 1 month and 3 days during the cold weather. Basir Ali was doing practical survey at Jorbát for 151 days. The time spent on tour by each of the kanungos of Nowgong was satisfactory. Further details as to the work of the kanungos are given in Appendices A and B.

Work of tahsildárs.

16. Five of the Kámrúp tahsildárs did a certain amount of testing in their circles. Babu Radha Nath ran 21·40 miles of check line, and Babu Uday Chandra 17·73 miles. Further details as to the work done by these officers are given in Appendix C.

Average size of mandals' circles.

17. The table below gives details as to the average size in the surveyed tracts of the mandals' circles as they stood after the revision of March 1890:—

District.	Total surveyed area in square miles.	Total number of mandals.	*Khiráj* area in acres per mandal.			*Nágf-khiráj* cultivation and waste in acres per mandal.	*Lá-khiráj* cultivation and waste in acres per mandal.	Grants in acres per mandal.	Total average area in acres per mandal.
			Cultivation.	Waste.	Total.				
Kámrúp	1,174·39	175	1,810	1,662	3,472	666	141	15	4,294
Mangaldai	547·02	64	2,000	2,712	4,712	493	49	216	5,470
Nowgong	586·59	33	1,958	1,849	3,807	52	19	150	4,070
Sibságar	656·99	92	2,641	1,400	4,041	35	25	375	4,468
Average	Total. 2,964·99	Total. 424	2,052	1,804	3,856	368	75	153	4,452

Average size of kanungo's circle.

18. The average areas of the supervisor kanungo's circles are given in the statement below:—

District.	Total surveyed area in square miles.	Total number of kanungos.	Average *khiráj* area in square miles.			Average *nágf-khiráj* area in square miles.	Average *lá-khiráj* area in square miles.	Average Grants in square miles.	Total average area in square miles.
			Cultivation.	Waste.	Total.				
1	2	3	4	5	6	7	8	9	10
Kámrúp	1,174·39	10	49·50	45·44	94·94	18·20	3·90	·39	117·43
Mangaldai	547·02	3	66·65	90·40	157·05	16·44	1·62	7·21	182·32
Nowgong	586·59	4	71·14	67·18	138·32	1·89	·70	5·48	146·39
Sibságar	656·99	5	75·80	40·20	116·0	1·02	·60	10·80	128·42

The exact size of the five circles in Sibságar is given below:—

			Miles.
I.	Golaghát—Southern circle	... ...	116·48
	Northern „	... ...	125·12
II.	Jorhát—Eastern „	... ...	148·54
	Western „	... ...	166·44
III.	Sadr—Western „	... ...	87·07

General summary.

19. On the whole, progress has been made in the area cadastrally surveyed. The new rules have worked well, and the weekly statements received from the mandals enable each Deputy-Commissioner and Sub-divisional Officer to see exactly what his men are everywhere doing. Supervision has in consequence been more efficient. The areas with fluctuating cultivation have been inspected with more care by both kanungos and Sub-Deputy-Collectors, and in Kámrúp, where theodolite stations were not marked by *simul* boughs, mounds have been put up for the guidance of the mandals in the more difficult tracts.

(b) Mauzas not cadastrally surveyed.

Unsurveyed mauzas.

20. It proved impossible to examine the papers in any of these, except in a few instances in the Barpeta sub-division. The area of these mauzas is yearly contracting, as that of the survey extends, and it seems probable that in a comparatively short time the unsurveyed tracts will only form a narrow and non-continuous fringe of assessed land around the surveyed area of the Province.

B.—Mauzadárs' measurements.

Testing of measurements.

21. The statement on the opposite page gives details as to the extent to which mauzadárs' measurements were tested in unsurveyed areas.

Statement of testings of mauzadárs' measurements (acres).

District.	1888-89.			1889-90.		
	Area shown by mauzadárs.	Area as tested.	Net percentage of errors in mauzadárs' area.	Area shown by mauzadárs.	Area as tested.	Net percentage of errors in mauzadárs' area.
Goálpára	12,281	12,112	+ 1·39	10,762	11,320	—5·18
Kámrúp	5,131	5,149	— ·35	4,953	5,325	—7·51
Darrang	4,185	4,498	—7·47	3,749	4,302	—14·75
Nowgong	4,016	4,457	—10·98	226	229	—1·31
Sibságar	3,415	3,453	—1·10	2,503	2,533	—1·19
Lakhimpur	2,724	3,217	—18·09	3,889·50	4,421·64	—13·68
Total ...	31,752	32,886	...	26,082·50	28,130·64	...
Average ...	...	...	—3·57	...	...	—7·81

In Kámrúp and Lakhimpur the area tested was greater during the year under report than in the year before. In Goálpára, Darrang, and Nowgong there was a decrease. The falling off in Nowgong was very great, and is explained by the Deputy-Commissioner as due to the Sub-Deputy-Collector's testings having been confined to the cadastrally-surveyed area. The above five districts were unaffected by the survey. In Sibságar the cadastral survey was at work, and the area available for testing decreased considerably.

Testing agency.

22. The amount of testing done by each class of officer who was engaged in this work is given in the statement below:—

Testings done by different classes of officers (acres).

Name of district.	By Deputy-Commissioner.	By Assistant-Commissioner and Extra-Assistant-Commissioner.	By tahsildárs.	By mauzadárs and amins.	By district surveyors.	Total area measured by officers other than Sub-Deputy-Collectors.	Area measured by Sub Deputy-Collectors.	Grand Total.
1	2	3	4	5	6	7	8	9
Goálpára	726	.....	.....	6,035	3,783*	10,544	776	11,320
Kámrúp	88	126	3,264	302	534†	4,314	1,011	5,325
Darrang	237	78	2,379	83	465	3,242	1,060	4,302
Nowgong.....	229	.....	.....	.....	.....	229	.....	229
Sibságar	321	856	.....	314	.....	1,491	1,042	2,533
Lakhimpur	22·47	855·54	.....	.....	1,412·22	2,290·23	2,131·41	4,421·64
Total	1,623·47	1,915·54	5,643	6,734	6,194·22	22,110·23	6,020·41	28,130·64
Total of 1888-89.....	679	1,980	2,460	13,008	4,463	22,590	10,295	32,886

* Out of this, 978 was done by the Sub-Deputy-Collector's clerk and 2,805 by the office kanungo.
† This was done by the sadr kanungo.

C.—Survey Schools.

Changes.

23. The Gauháti Survey School was alone maintained during the year. The expenditure on this school was reduced in 1889 by the substitution of an Assamese trained mandal on Rs. 20 for the sub-surveyor from the Survey Department, who used to draw Rs. 50. So many mandals have now become trained surveyors that there is a wide field for selection, and the necessity for retaining a foreigner on high pay no longer exists. The statement on the following page shows how the schools have worked since they were founded.

Statement showing Operations and Cost of the Survey Schools.

Name of school.	Men who received first-class certificates.								Men who received second-class certificates.								Total number passed.		Total cost of schools.		Total receipt of schools.		Net cost of schools (being total cost, minus total receipts).		Average cost of each passed pupil on net cost.	
	Mauzadar.		Mandal.		Candidate.		Tahsildár.		Mauzadar.		Mandal.		Candidate.		Tahsildár.											
	Previous to 1888-89.	In 1888-89.	Previous to 1889-90.	In 1889-90.	Previous to 1888-90.	In 1888-90.	Previous to 1888-90.	In 1888-90.	Previous to 1888-90.	In 1888-90.	Previous to 1889-90.	In 1889-90.	Previous to 1889-90.	In 1889-90.	Previous to 1889-90.	In 1888-89.	Previous to 1889-90.	In 1889-90.	Previous to 1889-90.	In 1889-90.	Previous to 1889-90.	In 1889-90.	Previous to 1889-90.	In 1889-90.	Previous to 1889-90.	In 1889-90.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
																			Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Gauháti Survey School	3	..	12	6 (c)	7	3	2	(d)	6	1	119	14	197	84 (a)	..	..	257	108	5,639 8 0	1,156 9 0	2,793 4 0	1,130 0 0 (b)	2,300 4 0	26 9 0	8 7 9	0 3 11
Other Schools.....	1	..	30	..	6	..	..	..	30	..	239	..	71	..	..	..	377	.....	8,753 6 4	.....	1,861 14 6	....	7,571 7 10	.....	19 8 9	.....
Total.....	4	..	42	6	13	3	2	..	36	1	349	14	268	84	..	..	714	108	14,392 14 4	1,156 9 0	4,161 2 6	1,130 0 0	10,231 11 10	26 9 0	14 6 3	0 3 11

(a) Besides this, five outsiders were passed.
(b) This differs from the Comptroller's figures by Rs. 14, which were term examination fees, not included in survey school accounts.
(c) Besides these, three outsider mandals were passed in the examination held in November 1889 and first-class certificates were given to 23 Nowgong and 37 Sibságar mandals who worked as mandal-amins with the Cadastral Survey Party.
(d) One tahsildár was passed in the examination held in November 1889, but he was an outsider.

24. The Gauháti School has become almost self-supporting, as the cost to Government of each passed pupil has now fallen to Re. 0-3-11. The system of rewards and fines has proved a decided financial success.

Decrease in cost.

25. The number of qualified mauzadárs, mandals, and candidates living on 31st March 1890 is given in the statement below :—

Results.

Statement showing results of the Survey Schools up to 31st March 1890.

Name of district.	Total number on 31st March 1890.		Number exempted on 31st March 1890.		Men with first-class certificates in existence on 31st March.						Men with second-class certificates in existence on 31st March.					
					Mauzadárs.		Mandals.		Candidates.		Mauzadárs.		Mandals.		Candidates.	
	Mauzadárs.	Mandals.	Mauzadárs.	Mandals.	1889.	1890.	1889.	1890.	1889.	1890.	1889.	1890.	1889.	1890.	1889.	1890.
Kámrúp	11	304	...	8	3	3	14	21	5	5	1	1	219	231	131	172
Darrang	27	175	6	16	2	2	9	10	2	...	7	8	122	122	15	20
Nowgong	38	161	10	...	3	3	15	34	...	...	8	8	93	62	14	27
Sibságar	50	211	10	1	3	2	8	42	7	7	27	26	114	79	17	15
Lakhimpur	45	98	...	...	...	...	1	...	...	..	1	1	11	11	...	...
Total	171	949	26	25	11	10	47	107	14	12	44	44	558	505	177	234

Rewards and fines.

26. The statement below gives details as to the rewards paid and fines inflicted at the Survey Schools :—

Statement showing Rewards paid and Fines inflicted.

Name of school.	Amount of fines inflicted.			Amount of rewards given.		
	Previous to 1889-90.	In 1889-90.	Total.	Previous to 1889-90.	In 1889-90.	Total.
	Rs. As.	Rs.	Rs. As.	Rs	Rs.	Rs.
Gauháti Survey school	11 8	...	11 8	674	184	858
Other schools	153 8	...	153 8	896	...	896
Total	165 0	...	165 0	1,570	184	1,754

The term examinations were all satisfactorily conducted by Babu Chandra Kanta Sen, Sub-Deputy-Collector, and Babu Hari Mohan Lahiri, Deputy-Inspector of Schools.

27. The examination for 1st-grade survey school certificates has become biennial as noted in last year's report. One examination was held on the 9th and 10th November 1889, and the second on the 18th and 19th of April 1890. This last is, strictly speaking, outside the scope of this report, but is properly part of the cold-weather work. At the two examinations 8 tahsildárs, one mauzadár, 24 mandals, and 27 candidates appeared. Of these, one tahsildar, five mandals and four candidates passed.

Annual examinations.

The second examination, that at the close of the cold weather, is held solely with a view to giving the tahsildars an additional opportunity to pass. Of this opportunity they are apparently not desirous of availing themselves. It is a curious commentary on the state of things formerly prevailing in the province when I have to state that one of the tahsildars, who was formerly the district surveyor of Kámrúp, failed to qualify in practical survey.

D.— Cadastral Survey Party.

28. A separate annual report, dealing with the year ending 30th September 1889, was published, describing the operations of the cadastral survey party. Since that date the revision of the papers of the 656·99 square miles of Sibságar cadastrally surveyed in 1888-89 has been almost completed, an area of approximately 700 square miles in the same district cadastrally surveyed, and about 150 square miles in Nowgong done in traverse.

Area surveyed.

The map which accompanies this report shows how far cadastral survey work has proceeded in Assam.

29. Anxious to secure for as many as possible of the revenue officials of Assam a practical training in survey work, I arranged, with the previous sanction of the Chief Commissioner, that Deputy-Commissioners should send as many men as they could spare to do actual surveying with the Cadastral Survey Party. The following statement shows the number who were ordered to go to Jorhát:—

Training of local men.

	Kámrúp.	Darrang.	Sibságar.	Lakhimpur.	Total.
Government surveyor.....	1	.....	1	.....	2
Sub-Deputy-Collector.....	.....	1	.....	2	3
Sub-Deputy-Collector's clerk	.....	1	.....	2	3
Tahsil muharrir	.....	2	.....	.....	2
Mandals	18	16	40	21	95
Kanungos	.....	1	.....	.....	1
Total.....	19	21	41	25	106

30. Of these, all but two tahsil muharrirs and eleven mandals did some practical work in surveying, and returned to their districts trained in the methods now adopted. Two of the Darrang mandals never joined, and two tahsil muharrirs from that district, after joining, refused to do any work on the ground that it was derogatory. They were sent back to their districts, and dismissed by the Deputy-Commissioner.

Manner in which local men worked.

The statement below shows how the mandals worked:—

District.	Number of mandals.	Number who did no work.				Number who did work.				
		Owing to incompetency.	Being sent for by Deputy-Commissioner.	Sickness.	Other causes, see Note.	100 to 200 acres.	200 to 300 acres.	300 to 400 acres.	400 to 500 acres.	Above 500 acres.
Kámrúp	17	.....	.....	.....	2	1	2	3	.....	9
Sibságar	39	.....	.....	.....	.....	.....	.....	1	.....	38
Nowgong.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Darrang	18	.....	.....	.....	3	.....	2	3	3	7
Lakhimpur.....	21	4	4	.....	1	.....	.....	4	2	6
Total	95	4	4	.....	6	1	4	11	5	60

NOTE.—Kámrúp.—Two engaged on revision work.
Darrang.—Two not joined.
" One joined 31st October, sent back to district after training.
Lakhimpur.—One engaged on revision work.

31. In the statement below details are given as to the outturn of work done and the pay drawn, last season and the season before, by those mandals and candidates who worked on after the 15th of March. This for 1889-90, includes 49 mandals and 21 candidates.

Outturn of work.

Serial No.	Class of amín.	Acres.		Pay.	
		1888-89.	1889-90.	1888-89.	1889-90.
				Rs. As. P.	Rs. As. P.
1	Maximum area and pay for a last year's mandal	2,214	1,991	64 6 11	31 15 9
2	Minimum ditto ditto	1,588	1,560	23 7 3	14 3 7
3	Average ditto ditto	1,939	1,708	40 12 3	20 5 2
4	Maximum ditto candidate..	2,540	2,705	124 0 3	88 6 6
5	Minimum ditto ditto	1,807	1,500	69 4 1	27 15 0
6	Average ditto ditto	2,154	2,031	87 4 8	54 6 2
7	Maximum area and pay for a this year's mandal	1,680	1,455	43 10 2	21 4 9
8	Minimum ditto ditto	833	761	11 10 7	10 3 11
9	Average ditto ditto	1,374	1,144	23 7 3	15 0 4
10	Maximum ditto candidate..	1,746	2,116	60 15 6	51 1 3
11	Minimum ditto ditto	1,224	923	26 7 10	26 6 5
12	Average ditto ditto	1,409	1,268	38 15 10	35 4 0

The decrease in the rate of pay indicated by the above figures is, Mr. Barrett says, not a fact. The work is paid for at a fixed sum per centum of half the total number of acres *plus* fields. The fields in the second year's work were not as numerous as those in 1888-89, and the amount earned per 100 acres naturally decreased.

Mr. Barrett's opinion.

32. Mr. Barrett, Deputy-Superintendent of Survey, makes the following remarks on the work done by local agency during the past year:—

"The training of mandals was taken in hand, as usual, by a party of Sub-Surveyors and Inspectors under an Assistant-Surveyor a month before the commencement of active operations. The local establishments on the 1st November 1889 comprised 80 mandals and 24 candidates; additional men, however, continued to arrive till about the 1st of December, on which date the number of mandals was 93, and of candidates 28. Of the 93 mandals, only 33 remained with the party till the close of the season, the majority having been sent back to their districts when their services were no longer required, or because their return was asked for by district officers.

"In addition to the mandals and candidates, three Sub-Deputy-Collectors, three Sub-Deputy-Collectors' clerks, two District Surveyors, and one supervisor kanungo were taught practical surveying, but they did little actual work, as they were sent back to their districts early in the season.

"The Kámrúp, Darrang, and Lakhimpur mandals worked very well for first-year men, but the old Sibságar mandals did not work nearly as well as the Nowgong mandals worked in Sibságar last year. This, I believe, can be explained by the difficulty of restraining Assamese from making repeated visits to their homes, especially during their numerous festivals, if they happen to have their work anywhere in the neighbourhood.

"It is hardly possible to make a comparison between the earnings of the local men this year and their earnings last year, as during 1888-89 the local establishments remained steadily with the party from start to finish. During the season just ended the average number of local men was for November 110, for December 111, for January 114, for February 87, for March 61, for April 60, and for May 58.

"The season's work has been fairly successful, an area of over 700 square miles, comprising about 525 square miles of field survey and about 175 square miles of Grant survey, having been completed. Mandals were exclusively employed in village survey, and Hindustanis almost as exclusively in the survey of Grants. The local men worked accurately and well in the open country, but they seemed to have a rooted aversion for, and were not quite as careful in, jungle tracts, which necessitated the exercise of more than ordinary care on the part of the supervising staff to ensure accuracy.

"No payments were made on account of *substitutes* for the mandals, as the necessity for the employment of such men did not arise in any of the districts."

Four mandals were sent back as quite incompetent, and four because their services were urgently required by the Deputy-Commissioners of their districts. Traverse work was found unexpectedly difficult owing to the forests, surrounding the Grants, in which much of it had to be done, and the Deputy-Superintendent of Survey was unable to furnish all the mandals with traverse sheets in time. Consequently, two-thirds of the men had to be sent back to their districts before the 15th of March.

E.— Grading of Mandals.

Promotions.

33. In the statement below are given the figures showing the promotions sanctioned during the year in the grading of the mandals:—

Grading of Mandals.

Name of district.	Sanctioned scale.				Scale on 1st April 1889.				Scale on 1st April 1890.				Increase during the year.				Per cent. of Increase
	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	
Kámrúp	60	80	160	300	4	84	211	299	11	89	179	279	+7	+5	−32	−20	..
Darrang	38	57	93	190	..	34	142	176	10	42	89	141	+10	+8	−53	−35	..
Nowgong	61	60	100	220	8	34	147	189	99	10	116	161	+27	−24	−31	−28	..
Sibságar*	44	68	110	220	..	10	201	211	8	26	146	190	+8	+16	−55	−21	..
Lakhimpur	24	86	60	120	..	11	87	98	..	11	87	98	..	..	..	..	..
Total	206	349	675	1,030	12	173	788	973	78	188	608	869	+61	+15	−189	−104	..

* As noted before, the reduction in this district did not take effect till July 1st.

Reductions from third grade.

34. It will be seen that considerable changes have been effected. Promotions to the first grade were liberally given to all men who worked well with the survey party. The reductions that were rendered possible by the new rules were all made from the third grade, opportunity being taken to get rid of inefficient men. The new scheme referred to in paragraph 13 will, it is hoped, be at work this year.

II.— Analysis of Districts with reference to Security from Famine.

III.—System of Collection of Revenue and Rental in Precarious Tracts.

IV.—Measures of Protection.

Famine impossible.

35. Famine is unknown in Assam, and precarious tracts can hardly be said to exist. Measures of protection are, therefore, happily not needed.

V.—Agricultural Experiments.

A.—Crop Cutting.

Separate report.

36. Under the orders of the Government of India as contained in the review of the Annual Report of this Department for the year ending 31st March 1889, the series of experiments annually made to ascertain the outturn of various crops has been made the subject of a separate note, which was forwarded to the Secretary to the Chief Commissioner, with this office letter No. 1,208, dated the 27th June 1890.

B.—Malta Oranges, Citrons, and Lemons.

Aurantiaceæ.

37. These trees now number 215, as against 236 that were in existence last year. Ten died, and eleven were given away to the Khási Sirdár of Sohbar. The remainder are doing well.

C.—Eri Silk.

Experiment in *eri silk.*

38. It was stated in last year's report that arrangements had been made with a Cachar tea-planter to carry out an experiment in growing *eri silk*. Mr. Mackenzie, of Kalline Cherra tea-garden, with whom the compact was entered into was to supply full details as to the experiment, and was to be paid half the cost of whatever expenditure he incurred up to a limit of Rs. 1,500. Mr. Mackenzie received a plot of ground rent-free, and put down in the spring of 1889, 20 acres of castor-oil plants. These did well until July, when a caterpillar [subsequently identified as the larva of the Noctues moth *achæa meliverte* (Drury)] appeared on the crop and by the third day stripped every tree of its leaves. An attempt was made to rear some of the worms on leaves obtained in the neighbouring jungle, but a disease, believed to be that described as "*flacherie*" by M. Pasteur, broke out amongst the worms, and the whole crop failed. The total cost of the experiment was Rs. 2,391-5-0, of which Rs. 155-5-9 was subsequently recovered from coolies who had received a bonus. The net cost to Government was, therefore, Rs. 1,102-15-8. A detailed account of the experiment is being written and will be subsequently published.

This is the fourth occasion within my own knowledge in which a crop of castor-oil plants has been destroyed by caterpillars. A couple of years ago, Mr. Crowe, of North Lakhimpur, and Mr. Paton, of Tezpur, each lost a small crop of castor-oil, and last year Mr. Shaw, of Golághát, was a similar sufferer. It would seem almost as if the castor-oil plant could not be grown except in very small patches in Assam, for in the four attempts to grow it on a fair scale, which I have above referred to, it proved a failure. Yet there is hardly a village in the Assam Valley which does not cultivate the eri-worm, and small patches of castor-oil plant are to be seen in all directions. It may be that the proximity of jungle is what has proved fatal so far to success, and that the castor-oil plant could be grown freely in well-cultivated tracts. Whatever the true reason of our failure so far has been, it can hardly be doubted but that it will be found out if experiments be persevered with. The extreme value to the Province of the discovery of any system by which the eri-worm could be reared profitably on a large scale, is beyond all question.

D.—Potatoes.

Peronospera infestans.

39. The disease which has annually attacked the potato crop in the Khási Hills for the last three years appears to be disappearing. Dr. Barclay, Secretary to the Surgeon-General with the Government of India, who very kindly examined some diseased tubers sent to him, stated it as his belief that they had been attacked by the parasite *peronospera infestans*. The advice given to the Khásis in 1887, when the disease was most virulent, to give up their old fields and break up new ground for potatoes, has been acted on to an increasing extent during the last two years. Fresh land has been occupied in all directions, and the potato crop of last autumn had hardly a trace of the disease. This year also the crops are healthy, and the outlook is good.

E.—Forecast of Crops.

Mustard forecast.

40. The statement below gives details as to the forecast annually made with reference to the mustard crop :—

Year.	Quality estimated in annas.	Area under mustard in acres.	Outturn by calculation in tons at 500 lbs. per acre.	Forecast of export in tons.	Actual export in tons.
1886.....	14	151,850	33,895	30,000	23,507
1887.....	12	148,443	33,134	20,000	24,875
1888.....	8	138,813	30,985	10,000	21,656
1889.....	12	143,500	32,020	25,000	39,019
1890.....	12	160,500	36,000	27,000	.....

The elements of uncertainty which must alway render this forecast unreliable were described in last year's report. Under the orders of the Government of India, a preliminary report on the condition of the crop is to be sent by Deputy-Commissioners on December 1st, about six weeks before the actual figures for areas are usually obtainable.

VI.—Cattle-breeding and Veterinary Establishments.

A.—Cattle disease.

Cattle mortality.

41. Under the orders of the Government of India in letter No. 124C., from the Secretary in the Revenue and Agricultural Department, the above subject is to be treated of annually in this report. Deputy-Commissioners were accordingly asked to report as to the prevalence of cattle-disease.

In the Nága, Khási, and Gáro Hills, and in Nowgong, there appears to have been no unusual outbreak, nor was cattle-disease prevalent in those districts to any unusual extent. In Lakhimpur the number of deaths is reported as 1,283, and the total value of the loss as nearly Rs. 13,000. The disease is described as a kind of cholera or dysentery.

In Kámrúp two diseases, described as rinderpest and foot-and-mouth disease, were prevalent generally throughout the year. The number of deaths is reported as 29,967. In Sibságar the most prevalent disease is known by the people as cattle cholera, and the number of deaths is reported to have been 8,346. In the Eastern Duárs of Goálpára the number of deaths is said to have been 1,793. There are no figures obtainable for the permanently-settled area of that district. In Darrang the number of victims is said to have been 1,482, and their value is estimated at Rs. 99,339. In Cachar a mild outbreak, causing loss estimated at Rs. 4,500, occurred in a small area of the sadr subdivision between January and March 1890. In Sylhet anthrax is reported to have been prevalent the greater part of the year, the number of deaths from all causes having been put down at 10,692. The nature of the diseases is very variously reported from different districts, but there can be little doubt that anthrax, foot-and-mouth disease, and rinderpest claimed the majority of victims. In Sylhet 585 deaths are said to have been caused by scarcity of fodder. There can be no question but that there is ample scope for the introduction of remedial measures dealing with cattle disease, but it is doubtful if the expenditure they would involve is as yet justifiable in Assam. It is quite true that we want a veterinary instructor to educate the Assamese into combating cattle-disease, but there are many things we want more, and it will probably be several years before the question of cattle-disease assumes a relative importance sufficient to justify the expenditure without which action is impossible.

B.—Breeding.

Government bulls.

42. The three Kenwaria bulls imported in 1886 were stationed at Mangaldai, Nowgong, and Sibságar during the year. The following statement gives details as to the cost of keep and the work done by each :—

Name of district.	Wages of keeper.	Food.	Miscellaneous.	Total.	Remarks.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Remarks.
Mangaldai	82 0 0	32 6 0	1 13 0	116 3 0	This bull covered 37 cows, against 94 of last year. He was ill for 3 months.
Nowgong	84 0 0	36 0 0	6 7 0	126 7 0	This bull covered 57 cows, against 76 of last year.
Sibságar.....	96 0 0	53 3 9	2 10 0	151 13 9	This bull covered 27 cows, against 34 of last year.

The number of coverings recorded is discouraging, but it is improbable that all were duly recorded.

Mauzadárs' bulls.

43. Of the eight bulls imported into Mangaldái for the natives of that sub-division, four are reported to have died. Of the others, three are loose, and no record of coverings is kept. The total number of coverings by all the bulls reported for the year before death or before being let loose, is 124.

VII.—Agricultural and Fiscal Statistics.

Return XLI. B.

44. The statement below gives the dates on which the figures for this return, due to this office on the 1st of June were actually received:—

Dates of receipt.

R. B. McCabe, Esq., c.s.,	Deputy-Commissioner,	Lakhimpur,	on	19th May 1890.
J. Knox Wight, Esq., c.s.,	,,	Sibságar	,,	27th ,,
G. E. McLeod, Esq.,	,,	Nowgong	,,	30th ,,
J. D. Anderson, Esq., c.s.,	,,	Cachar	,,	30th ,,
G. Godfrey, Esq., c.s.,	,,	Goálpára	,,	8th June 1890.
R. S. Greenshields, Esq., c.s.,	,,	Darrang	,,	9th ,,
Major M. A. Gray, R.S.C.,	,,	Gáro Hills	,,	18th ,,
,, H. St. P. Maxwell,	,,	Khási and Jaintia Hills.	,,	18th ,,
J. Kennedy, Esq., c.s.,	,,	Sylhet	,,	19th ,,
A. C. Campbell, Esq.,	,,	Kámrúp	,,	21st ,,
A. Porteous, Esq., c.s.,	,,	Nága Hills	,,	9th July 1890.

VIII.—Trade and Trade Statistics.

45. The Foreign Trade Report, having been made triennial instead of annual, was not issued during the year under report, but the usual tabular statements were prepared, and an abstract submitted for the Provincial Administration Report.

Foreign Trade Report.

46. The Inter-district Trade Report was written for the last time for some years, the river registering post at Jagi having been abolished. The statistics obtained through the unpaid agency of the police at the other posts were considered too unreliable to justify the annual appearance of the report.

Inter-district Trade Report.

47. Quarterly reports dealing with the river-borne trade of the Province were regularly issued. The statement below shows the date on which the latest steamer returns were received from the Government of Bengal, and that on which the published report issued.

Quarterly reports.

Name of quarter dealt with in report.	Date on which last steamer return received from the Government of Bengal.	Date on which quarterly report sent to the Government of India.
Quarter I. (ending the 30th June 1889).....	20th September 1889.....	30th October1889.
,, II. (,,	30th September 1889) 11th December 1889.....	11th January 1890.
,, III. (,,	31st December 1889) 10th March 1890 ...	1st April ,,
,, IV. (,,	31st March 1890) ... 7th June 1890	30th June ,,

Punctuality.

48. The degree of punctuality observed in the issue of these reports is shown in the statement below :—

Year.	Number of days between end of quarter and date of despatch to Government of India.	Number of days between end of quarter and receipt of last return from Government of Bengal.	Number of days between receipt from Government of Bengal of last return and despatch to Government of India.
1885-86	99	69	30
1886-87	105	67·5	37·5
1887-88	111	73	38
1888-89	97	66	31
1889-90	102	73	29

In the foreign trade monthly reports the average number of days between the end of the month to which they related and the date of publication in the local *Gazette* was 25.

49. An enquiry was made during the year into the causes of the present depressed condition of the lime trade of Sylhet, and a report submitted to the Chief Commissioner by Mr. Greenshields. Apart from the question which was being enquired into, the subject proved of interest owing to the light thrown on the trade statistics collected at Bhairab Bázár. This traffic registering station is peculiarly unfortunate in its position. It lies within the jurisdiction of the authorities at Mymensing, but is supported by the Assam Government, and the establishment paid by the Deputy-Commissioner of Sylhet. The last-named officer practically can never visit it, and the Mymensing officers cannot be expected to take much interest in it. The registrar, therefore, is imperfectly supervised, and his returns have been proved in the case of the Sylhet lime trade to be very untrustworthy. I have suggested the desirability of transferring the post altogether to the Government of Bengal. I inspected the Dhubri traffic registering station on the 5th of July.

Enquiry into lime trade.

IX.—Miscellaneous.

A.—State Patronage of Mahomedans

50. This subject is referred to in accordance with the orders of the Chief Commissioner in circular letter No. 6,804-22, of 21st November 1888. There is only one Mahomedan, a Sub-Deputy-Collector, in superior service working under this Department.

Mahomedans.

B.—Insect Pests.

51. In Circular No. 62—20—102 A., dated the 20th September 1889, the Government of India desired that the Annual Report of this Department should contain a reference to any action taken in the direction of instituting an enquiry into the subject of insect pests. In February 1889 I sent to the Indian Museum a bottle containing specimens of caterpillars which destroy mustard crops. It was found impossible to identify it without the *imago*. In September 1889, Mr. Cossins, Sub-divisional Officer, Karimganj, sent to Calcutta some specimens of *dhan* injured by an insect which was duly identified as the *Leptocarsa acuta*. In August 1889 specimens of the caterpillar which proved destructive to the castor-oil plant were sent to Mr. Cotes, and identified as the larvæ of the Noctues moth, *achæa melicerte* (Drury).

Specimens sent to Calcutta.

C.—Fuel and Fodder Reserves.

52. The reasons why no action under Circular No. 22F., dated the 11th October 1888, of the Revenue and Agricultural Department of the Government of India, are required in Assam were explained in the annual report last year.

Reserves.

D.—Locusts.

53. In accordance with the wishes of the Government of India, as conveyed in Circular No. 26 C.—20 A., dated the 3rd December 1889, Mr. Cotes' Notes on locusts were distributed to all Deputy-Commissioners. From the replies received, it is evident that the locust is only a scientific curiosity in Assam. The Deputy-Commissioners of Goálpára, Darrang, Lakhimpur, Nága Hills, Khási Hills, and Cachar, report that it is unknown in their districts. In Nowgong locusts were last seen nine years ago. A few have now and then appeared in Sibságar and Kámrúp, where the Kacharis used them as an article of food. In Sylhet they are said to have last appeared in 1878. In the Gáro Hills they are just known to the people, but are practically harmless.

Locusts unknown in Assam.

E.—Bones as Manure.

54. Circular No. 67—112-1A., dated the 4th October 1889, from the Government of India in the Revenue and Agricultural Department, desired that information should be given in the report for 1889-90 as to the extent to which bones are exported from Assam. Deputy-Commissioners were consulted, and all are unanimous in saying that there is no export trade whatever in this commodity. Occasionally a few tea-planters have been known to import bones from Calcutta for manure, but the instances are rare. Practically, bones are never used in this Province as manure.

Bone manure.

F.—Expenditure.

55. The statement below shows the expenditure that has been incurred by this Department during the past seven years :—

Total cost.

Year.	Director's head office.	Settlement office.	Survey schools.	Grand total.
1	2	3	4	5
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
1883-84	15,668 9 1	5,270 12 4	5,422 11 6	26,362 0 11
1884-85	12,600 9 11	27,134 4 3	5,777 14 0	45,512 12 2
1885-86	16,616 12 10	29,396 11 5	4,055 10 10	50,069 3 1
1886-87	16,447 2 9	31,287 10 8	4,685 4 0	52,420 1 5
1887-88	18,148 11 4	35,730 2 4	4,052 12 10	57,931 10 6
1888-89	17,971 4 3	33,757 0 3	2,826 7 10	54,554 12 4
1889-90	20,426 12 0	40,472 4 7	1,156 9 0	62,055 9 7

The increase under the head sadr office was due to my absence on leave, the pay of the Officiating Director being debited with mine to the budget. The increase in the settlement office expenditure was caused principally by the larger establishment required for the intricate work of the *Nisf-khirâj* Settlement of Sibsâgar.

I have the honour to be,

SIR,

Your most obedient Servant,

H. Z. DARRAH,

Director, Department of Land Records and Agriculture, Assam.

APPENDIX A.

Statement showing time spent at different kinds of work by Supervisor Kanungos.

Name of Kanungo.	Number of days on tour.				Number of days sitting office work.	Number of days without work.							Miscellaneous work not included in above.	Remarks.
										Leave.				
	Examining check lists.	Testing crops.	Examining mauzahs' papers.	Enquiring into cases.		Travelling from place to place.	Gazetted holidays.	On account of rain.	For sickness.	Privilege.	Without pay.	Half pay.		
Joy Ram Das	8	.....	.....	.....	11	8	.....	8	.....	9	.....	.....	2	Since transferred to Nowgong. Cannot leave 1 day, sick leave 8 days.
Dhiraj Deka	39	7	.....	2	164	22	8	10	8	28	14	.....	8	Succeeded Joy Ram. There was no supervisor kanungo for 13 days. Privilege leave from 23rd July 1889, and leave without pay from 24th November 1889.
Mina Ram Das	41	20	17	6	132	19	24	4	8	28	....	.....	14	He joined on 23th May 1889. Privilege leave from 3rd August 1889.
Nanda Kumar Baha	38	15	22	29	58	24	28	.....	.....	30	.....	.....	48	Ditto on 16th May 1889. Ditto from 23rd June 1889.
Durga Ram	60	57	17	8	74	2	36	.....	....	30	.....	.....	69	Ditto on 23rd April 1889. Ditto from 14th July 1889.
Ganga Ram Das	69	14	70	40	121	8	26	.....	.....	10	.....	.....	8	Privilege leave from 30th September 1889.
Dino Nath Neogi	46	10	13	10	218	.....	.....	9	12	.....	.....	.....	47	
Pua Ram Mohunta	60	25	74	13	74	20	2	9	14	21	33	.....	20	Ditto from 27th July 1889 and leave without pay from 14th October 1889.
Maheswar Das	66	38	14	11	142	8	12	10	15	30	.....	.....	21	Ditto from 29th July 1889.
Nitya Nanda	6	4	64	7	122	4	12	.....	22	.....	113	.....	21	Leave without pay from 1st April 1889.
Lagnu Ram	60	10	7	19	162	7	15	4	.....	30	.....	.....	61	Privilege leave from 22nd July 1889.
Chandra Kanta Sarkar	24	30	4	75	137	4	15	9	9	30	.....	.....	38	
Munshi Bagir Ali	10	8	15	8	121	10	1	3	9	.....	.....	.....	170*	* Was at Jorhat, learning survey for 151 days.
Lakhi Kanta Das	28	22	29	6	72	.....	18	1	2	.....	.....	.....	41	He joined on 5th September 1889.
Joy Ram Das	70	39	35	21	109	20	26	7	3	.....	.....	.....	.....	
Lakshi Ram Das	*105	17	27	12	96	11	19	7	.....	.....	.....	.....	25	
Ram Rath Dutt	52	22	68	2	62	20	30	.....	.....	.....	.....	.....	40	
Sisa Ram Chowdhry	48	23	59	2	141	11	19	.....	3	15	.....	.....	12	Privilege leave from 12th May 1889 to 22nd May 1889, and again from 14th October 1889 to 18th October 1889.

APPENDIX B.

Statement showing work done by the Supervisor Kanungos, 1889-90.

Name of kanungo.	Number of *mandals* whose work tested.	Number of villages inspected.	Number of fields tested in the villages inspected.	Area in *bighas* of fields tested in each village.	Number of errors found involving change in map.	Number of errors found involving change in *dag-chihi*, but not in map.	Number of check lines run.	Total length in chains of check lines run.	Number of *kutcas*.	Number of *offsets*.	Number of check lines where *mandal's* map was found correct.	Number of check lines where mandal's map was found incorrect.	Number of errors above 40 links.	Number of cases in which mandal was ordered to re-survey.	Area of concealed cultivation discovered in each village.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				B. K. L.											B. K. L.
Ganga Ram Das	38	71	621	4,417 2 5	258	127	92	1,608·78	475	765	19	73	253	9	147 2 13
Nitya Nanda	4	10	90	242 0 15	36	2	24	300·54	99	137	2	22	40	8	.....
Durga Ram Dutta	17	29	993	2,590 3 0	227	27	99	2,215·50	991	914	39	60	113	6	.....
Deno Nato Neogi	25	51	4,097	10,440 1 14	.....	1	151	3,456·76	943	1,857	.....	151	287	.....	1 4 8
Mohesvar Das	21	64	4,403	10,277 0 0	295	104	78	2,009·85	631	525	15	63	160	23	6 1 12
Lagnoo Ram	24	42	1,773	23,192 0 0	153	1	125	5,481·02	1,551	1,299	75	50	152	25	.....
Nunda Kunar	9	22	591	1,270 0 0	64	5	35	2,480·90	589	583	17	68	293	61	.....
Tua Ram Mohant	13	40	2,823	11,812 0 16	293	40	169	4,088·71	736	738	147	22	190	15	22 4 15
Dhir Singh	12	26	816	2,460 2 5	70	50	112	1,693·79	402	603	51	61	9	.....	1 3 15
Mina Ram	19	34	1,042	8,522 0 19	175	.....	81	2,020·81	665	1,056	15	66	10	6	1 4 17
Chandra Kanta Sarkar	35	154	910	2,299 0 0	44	.....	67	1,661·85	387	767	2	65	443	1	.....
Lakshi Kanta (from 6-9-89 to 31-3-90).	22	35	286	462 0 0	35	.....	15	246·39	112	176	4	11	18	.....	.....
Basir Ali	31	240	170	1,414 0 0	26	1	33	435	88	133	18	15	7	2	.....
Sisu Ram Chaudhry	37	101	5,706	17,890 0 0	98	4	114	1,856·43	530	787	80	34	76	6	9 1 10
Joy Ram	34	82	902	2,730 2 13	356	23	116	2,746·29	572	869	27	89	109	31	25 3 12
Ram Rath	26	57	1,140	2,360 0 0	157	7	58	1,225·95	461	835	17	41	80	2	12 0 0
Lakshi Ram	21	75	3,033	27,936 4 0	547	208	228	4,766·61	1,284	1,920	114	114	334	41	64 4 14

APPENDIX C.

Statement showing testing done by Tahsildárs.

Name of tahsildár.	Number of mauzás where work carried.	Number of villages inspected.	Number of fields touched by the chain in inspected villages.	Area in bighas of fields touched by the chain in such villages.	Number of errors found in existing village map.	Number of errors found involving change in shape, but not in area.	Number of check lines run.	Total length in chains of check lines run.	Number of karans.	Number of effects.	Number of check lines where mauzás's map was found correct.	Number of check lines where mauzás's map was found incorrect.	Number of errors above 40 links.	Number of cases in which mauzá was ordered to re-survey.	Area of concealed cultivation discovered in such villages.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
			B. K. L.												
Radha Nath Barua	16	76	630	8,620 2 17	19	2	82	1,712·64	696	684	62	21	4	6	.....
Udai Chandra Barua	10	18	362	797 0 1	290	2	48	1,418·61	325	251	13	35	.....	11	.....
Bangsidhar Sarma Barua	13	19	224	1,384 2 6	180	.....	20	239·45	135	119	26	24	2	24	.....
Chini Ram Das	2	6	134	425 0 11	2	3	14	[229·18	129	129	12	2	.....	.....	.....
Prithi Ram Chandhuri	9	10	165	3,846 3 0	61	.....	18	421·93	128	242	.....	18	6	.....	.....
Dharanidhar Baruah	2	2	20	25 4 8	.....	.....	.....	13·90	13	8	.....	.....	.....	.....	.....

A. S. Press (P. & R.) No. 102—300—24-7-90.

Report of the Agricultural Department in Assam for 1889-90.

It is requested that any reply, or future reference, to this communication may quote its number, distinguishing letter, and date.

No. 2,540R.

FROM THE OFFG. SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM,

TO THE DIRECTOR OF THE DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM.

Dated Shillong, the 9th August 1890.

SIR,

I AM directed by the Chief Commissioner to communicate the following remarks upon your letter No. 1,247, dated the 1st July 1890, embodying your Report on the Operations of the Department of Land Records and Agriculture in Assam during the year 1889-90.

2. *Paragraph 8.*—The testing and general work done by Sub-Deputy-Collector Babu Chandra Kanta Sen was very satisfactory, but a better outturn of work will be looked for during the approaching season from Babu Phanidhar Chaliha. The services of Babu Sarat Chandra Mazumdar were obviously not fully utilized, and the Deputy-Commissioner will be requested to furnish a further explanation on this point.

3. *Paragraph 10.*—The Commissioner of the Assam Valley Districts will be requested to report, for the information of the Chief Commissioner, what action was taken on your representations regarding the theodolite stations in the Nowgong district.

4. *Paragraph 11.*—The services of Babu Chandra Kanta Sen, Sub-Deputy-Collector, in connection with testing and general work have already been noticed. The Chief Commissioner is also glad to observe that this Sub-Deputy-Collector is reported to have done good work in the matter of introducing the revised rules for the maintenance of settlement papers in Kámrúp and Mangaldái. You should be careful to see that the working of the new rules is closely watched, great care being taken to explain them to the mandals brought under their operation.

5. *Paragraph 13.*—The scheme for utilizing the savings which have accrued owing to reductions made in the number of mandals is under the separate consideration of the Chief Commissioner.

6. *Paragraph 16.*—The Chief Commissioner is not satisfied that a sufficient amount of testing was done by the tahsildárs in Kámrúp, and the attention of the Deputy-Commissioner will be called to the subject, to which Mr. Quinton attaches great importance.

7. *Paragraph 22.*—The results of testings shown in the table against Nowgong are very unsatisfactory, and the Chief Commissioner expects Major Gray, who has now assumed charge of the district, to devote special attention to this important duty.

8. *Paragraph 27.*—As observed in paragraph 4 of the review on your Report for 1888-89, the tahsildárs and mandals must be required to qualify themselves in surveying, and special reports must be made by district officers on all such officers who may fail to qualify during the approaching season.

9. *Paragraph 28.*—The outturn of work done by the Cadastral Survey Party is satisfactory, and the completion of the survey programme within the next three years seems now a result likely to be attained at a cost much less than was originally anticipated.

10. *Paragraph 32.*—The employment of mandals in making the village survey has now become an established practice of the Cadastral Survey, and has resulted in a large diminution of the cost of the operations. Care will be required on your part to maintain the standard of knowledge acquired by mandals after the withdrawal of the Survey Party.

11. *Paragraph 41.*—The Chief Commissioner fears that the conclusion arrived at by you must be accepted. The Administration finds it a task of the greatest difficulty to induce the people to adopt the simplest sanitary precautions for the protection of their own health, and a recognition of the benefits arising from a more humane, but doubtless more expensive, treatment of their cattle must be of slow growth. The appointment of a Veterinary Surgeon to teach the people to resort to such treatment would have no practical effect beyond increasing the burden on Provincial revenues. The statement given in paragraph 42 shows the little value attached by the Assamese to improving their breed of cattle.

12. In conclusion, I am to convey to you Mr. Quinton's thanks for the ability, zeal, and energy which you have shown in administering the Department under your charge.

I have the honour to be,

SIR,

Your most obedient Servant,

F. C. DAUKES,

Offg. Secretary to the Chief Commissioner of Assam.

A. S. Press (Revenue) No. 51—300 plus 30—11-8-90.

ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

FOR

1890-91.

By RAI SARAT CHANDRA BANERJI, BAHADUR, M.A., B.L.,
OFFICIATING DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE.

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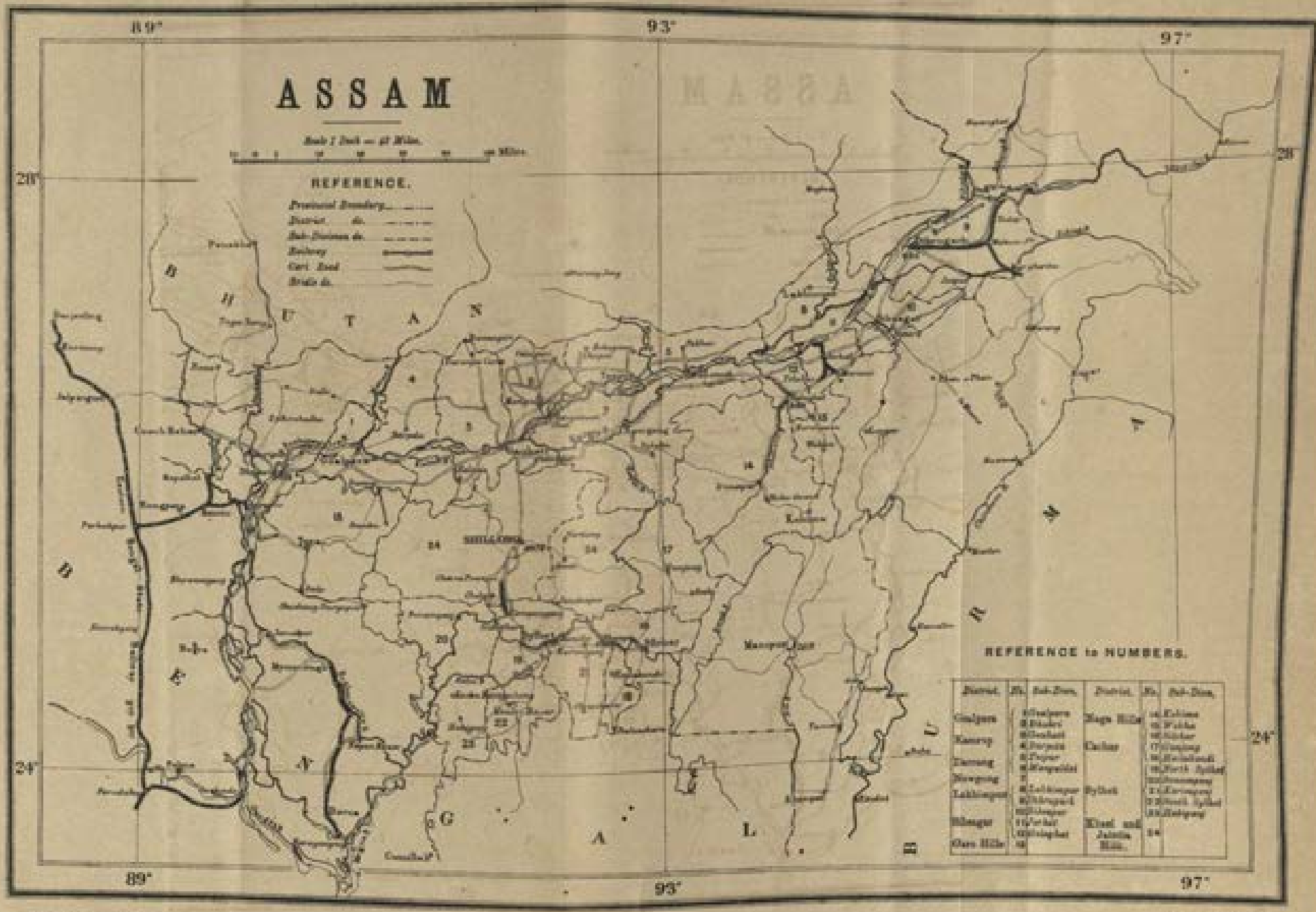
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ANNUAL REPORT OF THE DEPARTMENT OF LAND RECORDS AND AGRICULTURE. ASSAM, FOR 1890-91.

No. 2086, dated Shillong, the 30th July 1891.

From—Rai SARAT CHANDRA BANERJI, Bahadur, M.A., B.L., Officiating Director, Department of Land Records and Agriculture, Assam,

To—The Secretary to the Chief Commissioner of Assam.

SIR,

I HAVE the honour to submit herewith the Eighth Annual Report giving an account of the operations of the Department of Land Records and Agriculture during the year ending 31st March 1891. The plan and arrangement of the report have been altered under the orders and personal supervision of the Chief Commissioner.

Charge of the department.

2. Mr. Darrah was in charge of the department almost up to the close of the year. He was succeeded on the 13th February 1891 by Mr. Cossins, Assistant Secretary to the Chief Commissioner, who carried on the current work of the Director's office in addition to his own duties till his death in Manipur towards the end of March, when Mr. LeMesurier, Assistant Secretary, took up the work. I was not in charge during any part of the year.

Headquarters work of Director.

3. The year was an unusually severe one in the matter of reports. There are three which are annually issued by the department, *viz.*, the Departmental Report, the River-borne Trade Report, and the Settlement Report. A fourth, the Provincial Land Revenue Report, is also annually written by the Director. These four were issued as usual. In addition, this was the year for the Triennial Foreign Trade Report, and it was published on the 20th June 1890. Mr. Darrah's visit to Burma involved an account of what he saw there, and on the 24th June 1890 his note on Burma and Assam was published. Arising from this note was the question of revision of the settlement in Assam, and Mr. Darrah, after looking up correspondence relating to the early history of the Province, obtained from the office of the Bengal Board of Revenue, compiled a note on the history of former settlements in Assam. During the year 1889 an experiment, of which Government paid half the cost, had been tried in growing *eri*-silk, and it was necessary to write a separate account of this. To make his note complete, Mr. Darrah examined the Secretariat records and, in his monograph on "The *eri*-silk of Assam," brought into the compass of a single pamphlet all the information obtainable up to date on the subject. The experiment in survey and settlement tried in Barpeta involved another report, as upon the results there obtained the question of the retention of the survey party in the Province mainly depended.

Touring by Director.

4. On the 1st April 1890 Mr. Darrah was in the Barpeta subdivision, where he had gone to test the results of the cadastral survey experiment begun during the preceding cold weather. On the 18th April he returned to Gauháti, and held the annual spring examination for first-class survey school certificates. On the 20th April he returned to headquarters at Shillong. On the 12th August he started on tour, and inspected mandals' papers at Gauháti, but the completion of the Provincial Revenue Report, already far behind its usual date, necessitated his returning to headquarters on the 20th August. The report was barely finished when the Lushai rising compelled the Chief Commissioner to make early arrangements for supplies required for the expedition, which was to start in the cold weather, and Mr. Darrah was deputed on the 2nd October to obtain and forward stores from Dacca. Failing to get there all he required, he was obliged to visit Calcutta. From this business he returned on the 22nd October, and owing to the delay it caused to his regular work, which during his absence was practically at a standstill, he was unable to move into camp till the 15th November. On that date he started for the Pratabgarh pargana in Sylhet, in order to make local arrangements for the survey and settlement which had been sanctioned there. He left Fenchuganj on his way back to the Assam Valley on the 15th December, and, travelling by way of Goalundo, reached Dhubri on December 20th and Goálpára on the 21st. On the 22nd he started for Chuliakata, near which most of the work connected with the completion of the Barpeta experimental survey was to be done, arriving there on the 26th. From that date till the 15th January Mr. Darrah was engaged in making local arrangements in the subdivision for the completion of the cadastral survey and in making enquiries into the subject of cattle. On the 18th January he reached Gauháti, where he inspected the mandals' papers of the Hajo tahsil (the requirements of the census preventing

more mandals coming in), and completed arrangements for supplying mandals with furniture and for getting tubes and racks made for the cadastral maps. On the 27th he went to Rangamati, whence he daily visited the settlement and survey camps at Punia till the 31st, when he marched to Kalaigaon, and thence to Udalguri to meet the Chief Commissioner. On the 4th February he was back at *Gauháti*, and there completed arrangements for the redistribution of the mandals' circles and the appointment of kánungos in the area for which faired papers are being given this year to the district authorities. At the same time the cattle note partly written at Barpeta was finished. On the 12th he returned to headquarters, and on the 13th gave over charge to Mr. Cossins, and left the Province on ten months' furlough.

5. The touring done by Sub-Deputy Collectors is shown in the following statement:

Tours of Sub-Deputy Collectors.

District.	Subdivision.	Name of Sub-Deputy Collector.	Number of days on tour.			Remarks.
			In cadastrally-surveyed mauzas.	In non-cadastral mauzas.	Total.	
Kámrúp ...	Sadr ...	Chandra Kanta Sen ...	20	9	29	
„	Barpeta ...	Raman Krishna Biswas ...	50	30	80	
Darrang ...	Mangaldai ...	Phanidhar Chaliha ...	92	72	164	
Nowgong ...	Nowgong ...	Bholanath Das ...	61	29	90	
Sibságar ...	Sadr ...	None.				
„	Jorhát ...	Lakshminath Kakati ...	34	79	113	
„	Golághát ...	Gopal Chandra Puri Bhuiyan ...	.....	.....	.....	
		Mashiut Ullah ...	62	54	116	
		Parvati Sankar Kar ...	.....	2	2	

The touring done by Sub-Deputy Collectors appointed to subdivisions not hitherto brought under cadastral survey is not shown in the above statement, but will be given in future reports.

The good work done in previous years by Babu Chandra Kanta Sen was noticed in the Chief Commissioner's Resolution on last year's report, and he has since been promoted to the post of Officiating Extra Assistant Commissioner. His work during the past year was rather intermittent. He was in charge of settlement work in Kámrúp till the end of November, but during four out of the eight months was either on leave or acting as Superintendent in the Commissioner's office. He could not therefore carry out a steady tour programme, and his hot-weather tour was a short one. He seems, however, to have taken advantage of the presence of a large number of mandals at headquarters during settlement time to examine their papers, and he devoted 42 days to this work.

Babu Raman Krishna Biswas, who took over charge from Babu Chandra Kanta Sen in November, utilised the touring season fairly well, visiting most of the mauzas on the northern bank of the Brahmaputra, where he checked the maps of 51 mandals. It is not satisfactory, however, to find that, except for a flying visit to Chhaigaon, the mauzas on the south bank remained entirely uninspected.

Babu Phanidhar Chaliha's returns show much better results than last year. He was 167 days out on tour, during 106 of which he checked the maps and papers of almost all the 64 mandals in the cadastral mauzas in his subdivision (Mangaldai) and devoted part of his time to the non-cadastral mauzas as well.

Babus Bholanath Das of Nowgong and Lakshminath Kakati of Jorhát were on the cadastral settlement establishment at the beginning of the year, and joined district settlement work in June. They spent 90 and 113 days respectively on tour while on district work. The amount of map-checking done by them is however small, only 17 days having been devoted to this important part of his duties by Bholanath and 5 days by Lakshminath, during which they checked the maps of only 15 and 2 out of 93 and 43 mandals respectively. In Nowgong there was apparently some actual surveying of grants to do, and at Jorhát, where Babu Lakshminath was stationed, the absence of a second officer for a time probably led to some of the general work of the subdivision falling upon him. But the results are extremely meagre none the less, and the matter will be separately looked into.

No returns have been received from Babu G. C. P. Bhuiyan, who, after a short spell of work in Golághát, was transferred to the Commissioner's office.

Babu Parbati Sankar joined the subdivision only at the close of the year. Munshi Mashiat Ulla, who was in charge in the interval, *i.e.*, during the greater part of the year, did a fair amount of work, and had for a time to look after both the subdivisions of Golághát and Jorhát. He was 116 days out on tour, during which he examined and checked the papers of all the 54 mandals under him and the maps of 20 out of 36 in the cadastral mauzas.

Tours of kánungos.

6. The following statement shows the amount of touring done by supervisor kánungos :

District.	Subdivision.	Name of kanungo.	Total area of circle in square miles.	Number of days on tour.	Remarks.
1	2	3	4	5	6
Kámrúp ...	Sadr ...	1. Ganga Ram Das ...	195·34	218	
		2. Nitya Nanda Das ...	28·93	79	
		3. Dinanath Neogi ...	125·19	120	
		4. Dhir Sing Deka ...	96·14	141	
		5. Laghnu Ram Das ...	103·27	46	
		6. Krishna Das ...	124·63	79	
		7. Tita Ram Gogai ...	133·29	58	
		8. Kannath Das,.. ...	112·60	111	
		9. Jina Ram Das ...	127·75	135	
		10. Sib Ram Bara ...	127·25	50	
	Barpeta ...	11. Mina Ram Das ...	127·25	160	
Darrang ...	Mangaldai ...	12. Chandra Kanta Sarkar ...	198·00	173	
		13. Basir Ali Biswas ...	198·04	161	
		14. Anandi Ram Das ...	150·98	123	
Nowgong ...	Nowgong ...	15. Lakshmi Ram Das ...	145·40	268	
		16. Jai Ram Das ...	167·95	140	
		17. Sisu Ram Chandhuri ...	156·04	127	
		18. Ramrath Datta, ...	117·20	185	
Sibságar ...	Sadr ...	19. Lakshmi Kanta Das ...	87·07	124	
	Jorhát ...	20. Durga Ram Datta ...	168·44	101	
		21. Nanda Kumar Naha ...	148·54	140	
	Golághát ...	22. Mohesvar Das ...	125·12	203	
		23. Puaram Mohanta ...	116·48	205	

Lakshmi Ram Das, of Nowgong, heads the list in the matter of touring with 268 days ; next come Ganga Ram, Puaram, and Mohesvar, each of whom did over 200 days. Laghnu Ram, Krishna Ram, Nityananda, Tita Ram, and Sib Ram were in charge of their circles only for a portion of the year. Laghnu Ram was specially selected during the year to take charge of the experimental survey in Barpeta, which he has brought to a successful termination. Of the rest seven were less than 150 days out on tour, which is an unsatisfactory outturn of touring for kánungos.

Test measurements.

7. The amount of testing done by Sub-Deputy Collectors and kánungos is shown in the Provincial Land Revenue Report along with the testing done by other officers.

Average size of kánungos' circles.

8. Details as to the average size of kánungos' circles are given below :

District.	Total cadastrally-surveyed area in square miles.	Total number of kánungos.	Average *khárij* area in square miles.			Average *mál-khárij* area in square miles.	Average *takhtaj* area in square miles.	Average waste land greater in square miles.	Total average area in square miles.
			Cultivation.	Waste.	Total.				
1	2	3	4	5	6	7	8	9	10
Kámrúp	1,174·39	10	49·50	45·44	94·94	18·20	3·90	·39	117·43
Darrang (Mangaldai) ...	547·02	3	66·65	90·40	157·05	16·44	1·62	7·21	182·32
Nowgong	586·59	4	71·14	67·18	138·32	1·89	·70	5·48	146·39
Sibságar	*1,377·59	8	74·88	65·50	140·38	·80	1·94	29·08	172·20

* The distribution was made before the survey was revised, and hence the total area here differs from the correct area, viz., 1,370·43 square miles.

The whole of the area surveyed in Sibságar during 1888-89 and 1889-90 has now been redistributed among eight kánungos, the second year's survey having comprised detached blocks, which could not conveniently be constituted into separate circles by themselves.

The areas of the eight different circles in Sibságar, as now re-arranged, are given below :

			Sq. miles.
I. Golághát ...	1. Southern Circle		144·36
,, ...	2. Northern ,, ...		154·62
II. Jorhát ...	3. North-west ,, ...		186·35
,, ...	4. South-west ,, ...		163·48
,, ...	5. Eastern ,, ...		146·88
III. Sadr ...	6. Western ,, ...		216·31
,, ...	7. Central ,, ...		120·19
,, ...	8. Eastern ,, ...		245·90
Total ...	... ...	...	1,377·59

9. Details as to the average size of mandals' circles in cadastrally-surveyed tracts are given below :

Average size of mandals' circles.

District.	Total surveyed area in square miles.	Total number of mandals.	*Khirej* area in acres per mandal.			Jágábárí cultivation and waste in acres per mandal.	Lákhiráj cultivation and waste in acres per mandal.	Grants in acres per mandal.	Total average area in acres per mandal.
			Cultivation.	Waste.	Total.				
1	2	3	4	5	6	7	8	9	10
Kámrúp	1,174·39	175	1,810	1,662	3,472	666	141	15	4,294
Mangaldai	547·02	64	2,000	2,712	4,712	493	49	216	5,470
Nowgong	586·59	93	1,958	1,849	3,807	52	19	150	4,028†
Sibságar	1,377·59*	167	2,296	2,008	4,304	24	60	891	5,280
	Total.	Total.							
Average	3,685·59	499	2,025	1,947	3,972	315	79	359	4,725

* Including the twelve villages incompletely surveyed in 1888-89.
† The figure given in last year's report, 4,076, was wrong.

No alteration was made during the year in the mandals' circles in the first three districts, but there were changes in Sibságar, where the survey of an additional area necessitated a re-arrangement of circles in some instances. In a few cases also strips of detached cultivated land falling outside the limits of the survey, which were too small to be made into independent circles, were made over to the mandal of the adjoining cadastral circle. This has however happened but rarely, and not in a way to make any material addition to the mandals' work.

Pay of mandals.

10. As noticed in last year's report, a scheme was submitted with a view to utilising the greater part of the savings described below in paragraph 15 by raising the pay of the mandals of the two upper grades from Rs. 8 and Rs. 10 to Rs. 9 and Rs. 12 in the five *ryotwari* districts of the Assam Valley, *viz.*, Kámrúp, Darrang, Nowgong, Sibságar, and Lakhimpur. This has been sanctioned by the Chief Commissioner separately for each district. As the operations of the survey party approach completion, it is more and more necessary to have an efficient and contented staff of mandals, as it is on them that the keeping up of the maps produced at such enormous cost chiefly depends. It is intended to reserve the first grade almost exclusively for those men who are not only good practical surveyors but have circles with really difficult surveying work to do. Promotions to the second grade, too, will, as a rule, not be given to any but qualified surveyors ; and though the pay of the third grade has for the present to be kept at the old figure, it is to be hoped that even a six-rupee appointment will come to be looked upon as of some value when it is a stepping-stone to one carrying with it substantial pay. In Goálpára, where the only *ryotwari* areas are the Eastern Duárs, the old rates of pay have not been altered.

The following statement shows the grades of mandals as they stood on the 1st April last, as compared with the grades at the close of the previous year :

Name of district.	Sanctioned according to the revised scale of 1889-91.				Scale on the 1st April 1890.				Scale on the 1st April 1891.				Increase during the year.			
	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.
Goálpára	5	7	15	26	11	..	26	26	3	22	26	....	+2	−3	....	
Kámrup	58	84	149	289	11	89	179	279	22	84	163	279	+13	+5	−17	....
Darrang	30	45	75	150	10	43	80	141	19	44	111	174*	....	+2	+31	+33
Nowgong	34	51	85	170	8	30	116	161	29	6	124	161	−6‡	−3	+8	....
Sibságar	58	87	93	190	8	86	146	190	13	21	163	197†	+5	−158	+17	+7
Lakhimpur	24	36	69	130	..	11	87	98	7	6	83	96	−7	−6	−4	−3
Total	182	273	485	910	78	188	683	894	91	176	685	932	+13	−12	+32	+38

* Reduction did not take effect till the close of the year.
† This includes four mandals for Dhaphlar group and three mandals for Salmara, which were added to the sanctioned scale.
‡ Three appointed supervisor kánungos, two dismissed, and one resigned.
§ Promoted to first grade 9, degraded 2, dead and transferred to other appointments 4.

Considerable changes were effected in the several grades in 1889-90, when promotions to the first grade were liberally given to all who worked well with the survey party, while the reductions in the staff of mandals referred to in paragraph 15 were all made from the third grade. During the year under report promotions were given more cautiously on the principles above explained.

House accommodation, &c., for mandals, zinc tubes, and racks for maps.

11. It was also proposed to spend part of the savings in providing house accommodation for mandals and furniture for their use while engaged on settlement work at headquarters. The arrangement, or rather want of arrangement, in this respect at most centres hitherto was altogether unsatisfactory, and, though no sanction has yet been received for the construction of houses, a sum of Rs. 2,500 was spent during the year partly in the purchase of furniture and partly in that of zinc tubes and racks for the cadastral maps. Photozincographed copies of these maps are now in the record room of each of the several subdivisions that have come under survey, and the excessively damp climate, as well as the ravages of whiteants, make their preservation a matter of anxiety. This led to the proposal for the purchase of zinc tubes and racks, which was sanctioned during the year, and for which a further provision has been made in the current year's budget.

Survey schools.

12. The Gauhátí Survey School is the only one of its kind now maintained in the Province. The annexed statement shows the working of the school during the past two years :

Year.	Number of men who received first-class certificates.				Number of men who received second-class certificates.				Total number passed.	Total cost of the school.	Total receipts of the school.	Net cost of the school (being total cost minus total receipts).	Average net cost of each passed pupil.
	Mauzadárs.	Mandals.	Candidates.	Total.	Mauzadárs.	Mandals.	Candidates.	Total.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
										Rs. a. p.	Rs.	Rs. a. p.	Rs. a. p.
In 1889-90	1	2	3	3	..	21	98	119	118	1,270 6 0	772	498 5 0	4 2 0
In 1890-91	6	3	9	1	14	84	99	108	1,156 9 0	1,120	36 9 0	0 3 11

The school has become nearly self-supporting, and though the cost to Government of each passed pupil increased during the year from Rs. 0-3-11 to Rs. 4-3-0, this was due to exceptional causes. It would appear from the returns that the census office absorbed a large number of possible candidates, and there was an abnormal falling off in receipts from schooling fees during the last three months of the year. On the other hand, a relatively large sum of money had to be expended in rebuilding the outhouses attached to the school which were blown down by a storm, and this went to swell the total expenditure. Another cause of increase of total expenditure, which is not to be regretted, was the larger amount of rewards paid to teachers for passing through the term examinations a larger number of mandals and candidates than in previous years.

The survey school teachers are paid to a certain extent on the basis of results attained. The school under existing orders has to pass one-fourth of the total number of pupils through the term examinations; failure to do so involves a fine, while a reward is paid for every pupil passed in excess of the fixed minimum. No fines were inflicted at the Gauhâti school last year; Rs. 276 were given in rewards against Rs. 184 in the previous year.

The number of qualified mauzadárs, mandals, and candidates that have been turned out by the survey schools of the Province up to the 31st March 1891 is given in the following statement:

Name of district.	Total number on 31st March 1891.		Number exempted on 31st March 1891.		Men with first-class certificates on 31st March.				Men with second-class certificates on 31st March.			
					Mauzadárs.		Mandals.		Candidates.		Mauzadárs.		Mandals.		Candidates.	
	Mauzadárs.	Mandals	Mauzadárs.	Mandals.	1890.	1891.	1890.	1891.	1890.	1891.	1890.	1891.	1890.	1891.	1890.	1891.
Goálpára	12	35	4	..	..	..	..	38	..	5	..	2	..	15	..	..
Kámrúp	11	284	..	8	3	8	91	78	5	5	1	3	231	235	179	215
Darrang	27	143	4	11	2	2	10	20	..	1	8	7	122	109	20	25
Nowgong	26	163	10	..	3	3	54	29	..	..	8	7	62	79	27	37
Sibságar	48	197	10	..	3	4	42	33	7	..	26	28	70	103	15	..
Lakhimpur	40	96	..	..	..	..	..	7	..	..	1	1	11	6	..	..
Total	176	908	30	19	10	14	197	117	12	6	44	47	505	552	214	277

The quarterly term examinations for second-class certificates were carried out by Babu Chandra Kanta Sen, Sub-Deputy Collector, and Babu Harimohan Lahiri, Deputy Inspector of Schools, Kámrúp. The annual examinations for first-class certificates were made biennial in 1888-89, mainly for the purpose of enabling tahsildárs to qualify themselves, as, under recent orders, tahsildárs not specially exempted are required, before they can be confirmed in their appointments, to pass the first-class certificate examination. During the year under report, however, only one examination was held, in April 1890, at which 4 tahsildárs appeared, but none passed. One mauzadár, six mandals, and ten candidates also appeared, of whom only one mandal and two candidates passed. The second examination, which it was intended to hold in January 1891, was postponed till May in order to avoid interference with census arrangements. Although the results do not fall strictly within the scope of this report, they may be noted here. There were 30 examinees, *viz.*, 6 tahsildárs, 1 mauzadár, 10 mandals, 10 candidates, and 3 outsiders. Of these, 2 tahsildárs, 1 mauzadár, 9 mandals, 9 candidates passed. The number of mandals and candidates who succeeded in passing is satisfactory, but it is to be regretted that two-thirds of the tahsildárs who appeared failed. These first-class certificate examinations are ordinarily conducted by the Director, aided by a Sub-Deputy Collector.

13. The following paragraphs deal with the headings prescribed by the Government of India in Circular No. 54R., dated the 28th of April 1884.

Divisions of report.

I.—Organisation and Maintenance of Village Records.

14. The area cadastrally surveyed in the district of Sibságar in season 1888-89 (656·99 square miles) was settled during the year on the results of the survey corrected up to date, and the total area cadastrally settled in the Province is now 2,964·99 square miles. A further area of 713·49 square miles in Sibságar and about 800 square miles in Nowgong and Kámrúp is in course of settlement, and, according to the programme recently laid down, the bulk of the cultivation in the five *ryotwari* districts in the Assam Valley will have been settled cadastrally by the close of the year 1892-93. The non-cadastral area will then lie only in isolated small patches aggregating on the whole about 700 square miles.

Area cadastrally settled.

15. The system of village records obtaining in these districts, both in cadastrally-surveyed and non-cadastral areas, was described and explained at length in paragraphs 7-9 and 23-25 of the first report of the department, *viz.*, that for 1883-84. The records consist principally of a field-book (*dág chitha* or *khasra*) and a revenue-roll (*jamabandi*), based in the cadastral area on village maps, which constitute the distinctive feature of that area. In non-cadastral tracts there are no maps. The papers and maps are kept up by the mandal, who forms the backbone of the whole system. He records in his papers the changes occurring from year to year and, in cadastral areas, plots them on the maps. He is supervised in these areas chiefly by the officer known as the supervisor kánungo,

System of village records.

and both are looked after by the Sub-Deputy Collector appointed to each subdivision. In non-cadastral areas there are no kánungos, and the mandal's work is looked after by the fiscal officer immediately above him, *i.e.*, the mauzadár, under the general supervision of the Sub-Deputy Collector. The jurisdiction of the Sub-Deputy Collector, while the records of the cadastrally-surveyed areas claim his chief attention, is not confined to such areas alone. According to the rules laid down for his guidance, it extends over all the mauzas in the subdivision to which he is appointed. As will be seen, however, from the concluding portion of the last paragraph, the settled area not brought under cadastral survey will in the course of a couple of years cease to bear any appreciable proportion to the total surveyed area, and the papers of non-cadastral mauzas are therefore of a gradually diminishing importance. In areas where the mauzadár has been superseded by the tahsildár, the work of the mandals and kánungos is also to some extent supervised by the latter officer, and steps have recently been taken with a view to making this supervision more effective than it has hitherto been.

Rules for the maintenance of records.

16. The rules for the preparation and maintenance of village records and settlement papers were revised in 1888-89, and the new rules were introduced in the following year into the first two districts cadastrally surveyed in the Province, *viz.*, Kámrúp and Darrang (subdivision Mangaldai), as described in paragraphs 11 and 12 of the report for 1889-90. During the past year they were introduced into Nowgong, and the first settlement of the area cadastrally surveyed in the district of Sibságar in 1888-89 was also based on these rules. The reduction in the number of mandals which the introduction of the new system rendered possible resulted, as stated last year, in an annual saving of Rs. 7,488. Since then a further area has been cadastrally surveyed in Sibságar; but as the cultivation in this is for the most part interspersed with wide stretches of waste, where extensions are anticipated, and where consequently the mandals' work will be comparatively heavy, it is not proposed to make any reduction in their number. The rules have worked well both in Nowgong and Sibságar, the process being facilitated in the latter district by a preliminary portion of the work laid down having been done for the mandals by the settlement office in advance.

Inspections of records.

17. Inspection of mandals' papers by the Director, either in cadastral or non-cadastral areas, was almost impossible during the year owing to Mr. Darrah's absence in the Surma Valley during a large part of the first half of the cold weather and the impossibility of getting mandals together in January and February owing to the demands of the census; but when he visited the district of Kámrúp in August and January, he examined the papers of 3 mandals of one kánungo's circle and 18 of another. His inspection notes were forwarded to the Deputy Commissioner, attention being drawn to the faulty treatment of maps by mandals in areas of fluctuating cultivation, as well as to the necessity of great discretion being exercised in the posting and transfer of kánungos. The work in the several circles is of very unequal character, and specially experienced men are required in those where large areas of shifting cultivation have to be dealt with.

The amount of supervision exercised by Sub-Deputy Collectors in the direction of the maintenance of village records is shown in the following statement:

District.	Subdivision.	Total number of mandals.			Number of mandals whose		Remarks.
		In mauzas cadastrally-settled	In mauzas not cadastrally settled.	Total.	Papers examined and checked in cadastral and non-cadastral mauzas.	Maps checked.	
Kámrúp ...	Sadr ...	157	63	220	126	60	There was no separate Sub-Deputy Collector for the Barpeta subdivision. The officer appointed to the sadr subdivision looked after the cadastral area in Barpeta also.
	Barpeta ...	18	46	64			
Darrang ...	Mangaldai ...	64	19	83	64	63	
Nowgong ...	Nowgong ...	93	68	161	94[a]	15	
Sibságar ...	Sadr ...	13	56	69	.....	.....	There was no Sub-Deputy Collector in the sadr subdivision during the year. One has since been appointed.
	Jorhát ...	43	31	74	43	2	
	Golághát ...	36	18	54	54	20	
	Total ...	424	301	725	381	160	

[a] This statement does not include papers examined and checked in the Eastern Duárs and Lakhimpur, regarding which no information has been received from the Sub-Deputy Collectors in charge.

The supervisor kánungos examined and checked the cadastral papers of all the mandals under them, and, as the following statement will show, the maps also of most of them in all subdivisions except Jorhát, where, it is explained that, owing to the permanent nature of the cultivation, there were few changes in the mandals' maps :—

District.	Subdivision.	Number of kánungos.	Total number of mandals under kánungos.	Number of mandals whose maps checked.
Kámrúp...	Sadr	10	157	153
	Barpeta	1	18	17
		11	175	170
Darrang	Mangaldai	8	64	63
Nowgong	Nowgong	4	93	89
Sibságár	Sadr	1	18	12
	Jorhát	2	48	12
	Golághát	2	36	36
		5	92	60
	Total	28	424	382

II.—Analysis of Districts with reference to Security from Famine.

III.—System of Collection of Revenue and Rental in precarious Tracts.

IV.—Measures of Protection.

Famine unknown.

18. As observed in previous reports, famine is happily unknown in the Province, and there are hardly any tracts that can be described as precarious : measures of protection are therefore not needed. It may be mentioned however that in the cold weather of 1889-90 a few hundred maunds of rice had to be sent up to the rather isolated station of Gunjong in the North Cachar Hills, where, owing to deficient rainfall, the rice crop was a partial failure, and local supplies ran short. There was a temporary scarcity too in the Gáro Hills, where the rice crop was below the average, and *tuccavi* advances had to be made to a few villages in consequence.

V.—Agricultural Experiments.

Crop-cutting.

19. Experiments to ascertain the outturn of crops form the subject of a separate report, which was submitted for the year to the Chief Commissioner with this office letter No. 1741, dated the 24th June last.

Experimental cultivation of rice.

20. At the request of the Commissioner of Coorg, 41 kinds of *sali dhán* and 5 kinds of *bao dhán* were sent to him for experimental cultivation in that territory. Owing unfortunately to short rain the season was not a favourable one for the experiment, and the Commissioner was unable to arrive at any conclusion from the reports received from the different taluks as to whether any of the kinds of paddy sent would answer for Coorg.

Fruit trees.

21. The plantation of Malta oranges, citrons, and lemons near Therrinaghát was kept cleared of jungle, and the trees, 215 in number, are reported to be doing well.

Sixty-three plants of nine different kinds of fruit trees, including mangoes and litchies, were obtained during the year from the Agri-Horticultural Society's Gardens at Calcutta for the plantation, but only 46 arrived alive, the litchies all dying *en route*. Eleven of the 46 plants have since died, but the remaining 35 are said to be doing well.

Eri silk.

22. An attempt was made during the year to introduce the *eri* silkworm into the North-Western Provinces, but without success. One hundred fresh live cocoons were sent from Gauháti to the manager of Sericulture, Dehra Dun, packed in a box with gimlet holes at the sides ; but on opening the box he found many of the cocoons pierced, a number of dead moths, and some eggs.

Very few of the eggs hatched, and the worms all died off. He suggests certain additional precautions in packing; and, looking to the growing importance of the trade in *eri* silk, there can be no doubt that persistent efforts should be directed towards introducing the industry into other provinces, where the conditions may be favourable.

Both Mr. J. T. Duthie of the Botanical Department, Northern India, and Mr. E. C. Cotes of the Indian Museum, Calcutta, applied for a supply of *eri* cocoons for the Government of Trinidad, St. Vincent. The difficulties of sending them successfully direct over such a long distance were explained by Mr. Darrah, who, when proceeding on furlough in February last, took with him a few cocoons home. He intended, if he succeeded in rearing the worm at the Kew Gardens, sending some newly-spun cocoons to Trinidad in compliance with the wishes of the Government.

Potatoes.

23. The potato crop was above the average in the Khási and Jaintia Hills, and no disease, such as that which attacked it in previous years, manifested itself during the year.

The Deputy Commissioner, Nága Hills, made an experiment in planting potatoes in his district. It proved a failure at the headquarters station, which is ascribed by Mr. Davis to the planting having been done late in the season. No reports were received from the outstations.

VI.—Cattle.

Cattle-disease.

24. This subject is dealt with here in accordance with the orders of the Government of India in letter No. 124C., dated the 28th January 1890. A separate note submitted in 1886 explained the general condition of cattle in Assam and the nature of the diseases they are subject to. The following statement compares the mortality of cattle as reported from the several districts of the Province during the past two years. Although from the nature of the agency available for collecting the required information, accuracy cannot be claimed for the figures, and the diseases described would seem to run into each other to a certain extent, the reports from the several districts give on the whole a very fair idea of the prevalence of cattle disease in the Province. The Commissioner of the Assam Valley Districts remarks that it notably retarded the progress of cultivation in the districts of Goálpára and Darrang and in the Golághát subdivision of the Sibságar district.

Name of district.	1		2		3		4		5		6		7		8		9		
	Rinderpest.		Foot-and-mouth disease.		Swelling of mouth and throat.		Diarrhœa, dysentery, and cholera.		Anthrax.		Catarrh.		Other diseases.		Total.		Estimated value of cattle.		
	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	
																	Rs.	Rs.	
Kámrúp	29,967	16,937	..	..	..	..	..	..	..	..	..	..	..	..	29,967	16,937	....	....	
Darrang	..	..	..	..	..	..	14,182	12,834	..	..	..	..	..	..	14,182	12,834	99,230	1,15,569	
Nowgong	..	..	..	..	..	..	..	9,404	..	..	..	..	3,869	....	....	13,273	....	....	
Sibságar	..	..	..	..	..	..	8,346	1,729	..	..	..	..	..	..	8,346	1,729	....	....	
Lakhimpur	..	..	..	..	..	..	1,282	679	..	..	..	..	..	..	1,282	679	12,000	6,790	
Cachar	..	..	..	191	..	..	..	..	..	..	..	..	..	..	..	191	4,000	1,900	
Sylhet	1,834	8,821	..	..	..	..	..	1,423	..	..	..	2,804	8,173	7,047	10,107	20,095	....	....	
Goálpára	..	2,477	..	998	..	1,797	..	..	..	..	..	..	1,703	..	1,703	12,269	....	....	
Khási Hills ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	....	....	....	
Nága „ ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	....	....	....	
Gáro „ ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	....	....	....	
Total ..	31,801	28,235	..	1,189	..	1,797	23,811	26,169	..	..	..	2,804	9,966	10,916	65,676	77,027	1,16,829	1,30,259	

There was no outbreak of cattle-disease in the three hill districts. There was no special outbreak in Lakhimpur, which returns 679 deaths during the year. In Sibságar there were only a few deaths in the Sadr and Golághát subdivisions, but a virulent outbreak of a disease described under the comprehensive appellation of bowel-complaint was reported from the northern part of the Jorhát subdivision, where in one small mauza the number of deaths amounted to 302 during April. Darrang returns 12,834 deaths, chiefly from diarrhœa, which is said to have prevailed more or less throughout the year. The next district, Nowgong, returns 9,404 deaths from what is described simply as "cattle-disease" and 3,869 from "other causes," but there is said to have been no special outbreak during the year. The report from Kámrúp is somewhat less vague. The diseases that prevailed chiefly were rinderpest and foot-and-mouth disease, but they did not assume an epidemic form. Rinderpest was not so prevalent as in previous years, and deaths were due chiefly to foot-and-mouth disease. The villages most affected were lowlying ones subject to annual inundation. In Goálpára there was disease throughout the year in some parts, and from December to May in others. The prevalent disease is described as small-pox, while foot-and-mouth disease and sore-throat also account for about a fourth of the total number of deaths.

In the Surma Valley a bad outbreak was reported from one thána in Cachar. The description given would seem to point to the disease being malignant sore-throat. In Sylhet the chief diseases were cow-pox and swelling of the throat, which prevailed in most parts of the district from March to May 1890 and February to March 1891.

Cattle breeding.

25. Of the three Kenwari bulls imported in 1886, which were stationed at Sibságar, Nowgong, and Mangaldai, the one at Nowgong was removed during the year to North Cachar. The one at Mangaldai has also been transferred to the *Sonthal* colony in Goálpára since the close of the year. The number of coverings at Nowgong and Mangaldai was small, and it is to be *hoped* that the people to whom the animals have now been sent will prove less apathetic in the matter than the Assamese.

The following statement gives details as to the cost of keep and work done by the bulls during the year :

Name of district.	Wages of keeper.	Food.	Miscellaneous.	Total.	Remarks.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Mangaldai ...	84 0 0	30 2 2	0 14 0	115 0 2	This bull covered 23 cows, against 37 of last year.
Nowgong ...	75 10 3	30 6 0	50 6 0	156 6 3	This bull covered 38 cows, against 57 of last year.
Sibságar ...	96 0 0	75 13 5	.....	171 13 5	This bull covered 31 cows, against 27 of last year.

Of the four surviving imported bulls belonging to private owners in Mangaldai, three are loose, and no record of their coverings was kept. The tahsildár of Kalaigaon, however, reports 25 coverings by his bull.

VII —Agricultural and Fiscal Statistics.

26. These statistics are being compiled, and will be submitted separately.

VIII.—Trade and Trade Statistics.

Foreign Trade Report.

27. The Annual Report on the River-borne Trade for 1889-90 was issued on the 7th October 1890. The Foreign Trade Report, having been made triennial, was not issued during the year, but an abstract was submitted for incorporation with the Provincial Administration Report.

Inter-district Trade Report.

28. As submitted in last year's report, the statistics obtained on the subject being unreliable, the special report that used to be written on inter-district trade has been given up now for some time.

River-borne trade reports.

29. Quarterly reports dealing with the River-borne Trade of the Province have been regularly issued during the year.

IX.—Miscellaneous.

Insect pests.

30. No action was taken during the year in regard to insect pests.

Locusts.

31. When it was remarked in last year's report that locusts were almost a scientific curiosity in Assam, it was not expected that they should prove such early visitors as they did. Some ten years ago they were seen in small swarms in parts of the Province, but not much damage was done, and as people generally have short memories unless there is something to impress them strongly, the occurrence had almost completely passed out of mind. Early last cold weather, however, a comparatively large flight of locusts made its appearance at Dhubri. The information supplied by district officers is hardly precise or complete enough to enable its movements to be traced with accuracy, but it seems to have come to the Province from the west, and travelled along both banks of the Brahmaputra throughout the valley, keeping chiefly to the alluvial mauzas, where the young mustard was no doubt the chief attraction. The eastern half of Darrang presents a continuous stretch of pure jungle for a long distance, and the absence of enticing food here would seem to have deterred a part of the swarms from pursuing their flight eastwards along the north bank, and they swerved to the north-west, visiting the submontane tracts of Kámrúp on their return journey in January. It is curious to note that according to the people of these parts the locusts finally disappeared across the Bhutan Hills. A good deal of damage was done to the mustard crop in the districts of Goálpára, Darrang, and Sibságar.

Mr. Darrah was touring in the Barpeta subdivision when he came across the swarm in its progress eastwards across the Monas river, and specimens of the insect were forwarded by him to the Superintendent, Geological Museum, Calcutta, and Mr. Cotes identified it with the *Acridium peregrinum*. He said there was no doubt that the flight had found its way to Assam across India from Rajputana.

Fuel and fodder reserves.

32. In Circular No. 22F., dated the 11th October 1888, the Government of India desired that a brief statement of the measures taken for the formation of fuel and fodder reserves along lines of railway should be noticed in this report. Under existing orders lands within a mile of the Assam Trading Company's Railway are not settled for long terms, and it has since been ruled by the Chief Commissioner that no more land should be leased within 100 yards of the Jorhát State Railway.

On the subject of fuel and fodder the Commissioner of the Assam Valley Districts observes—

> There is abundance of fuel in my division. We suffer from jungle. Our position is the reverse of that contemplated by the Government of India, and there is ample fodder for all purposes.

In the Surma Valley, however, a number of cattle deaths (585 and 1,126 during the past two years) from want of fodder is reported from Sylhet, where the difficulty of procuring it during the rains, when a large portion of the district goes under water, must be great.

Bones as manure.

33. As reported last year, bones are practically never used as manure in the Province, and there is no export trade in this commodity.

Expenditure.

34. The statement below shows the expenditure incurred by this Department during the past eight years :

Year.	Director's head office.			Settlement office.			Survey school.			Grand total.		
	Rs.	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
1883-84 ...	15,668	9	1	5,270	12	4	5,422	11	6	26,362	0	11
1884-85 ...	12,600	9	11	27,134	4	3	5,777	14	0	45,512	12	2
1885-86 ...	16,616	12	10	29,396	11	5	4,055	10	10	50,069	3	1
1886-87 ...	16,447	2	9	31,287	10	8	4,685	4	0	52,420	1	5
1887-88 ...	18,147	11	4	35,730	2	4	4,052	12	10	57,931	10	6
1888-89 ...	17,971	4	3	33,757	0	3	2,826	7	10	54,554	12	4
1889-90 ..	20,426	12	0	40,472	4	7	1,156	9	0	62,055	9	7
1890-91 ...	21,191	6	10	48,114	4	8*	1,270	5	0	70,576	0	6

* This includes cost of settlement office in the Assam Valley Rs. 20,538-11-6, cost of the settlement office in the Surma Valley Rs. 2,424-9-2, advance for prisms and prism-planting Rs. 12,369, cost of furniture for mandals Rs. 1,400, zinc tubes for maps Rs. 860, and iron racks for map tubes Rs. 200.

The increase in column 2 is due to the raising of Mr. Darrah's pay, the total for this item coming to Rs. 15,115, against Rs. 14,198 last year. The total under column 3— "Settlement office expenditure" includes two new items : (1) furniture, &c., for mandals supplied at a cost of Rs. 2,500, and (2) Rs. 2,426 spent in connection with settlement work in the Surma Valley, to which cadastral survey operations were extended during the year. These explain the greater part of the increase, and for the rest the amount advanced for prisms and prism-planting exceeded last year's figures by nearly five thousand rupees. This sum is recoverable from ryots, so that on the whole, as far as the settlement office in Assam is concerned, there was practically a decrease in expenditure.

I have the honour to be,

SIR,

Your most obedient Servant,

S. C. BANERJI,

Offg. Director, Department of Land Records and Agriculture, Assam.

APPENDIX A.

Statement showing time spent by Sub-Deputy Collectors on different kinds of work in Cadastrally-Surveyed Districts.

Name of district.	Name of sub-division.	Name of the Sub-Deputy Collector.	Number of days on tour.													Number of days doing office work.	Number of days at work not included in the above.	Number of days without work.					Grand total.	Remarks.
			In cadastral mauzas.						In non-cadastral mauzas.									Travelling from place to place.	Gazetted holidays.	Privilege leave.	Leave without pay.	Leave with half pay.	Total.		
			Running check lists.	Testing *dâg* by *dâg*.	Testing crops.	Examining mauzadar's papers.	Enquiring into cases.	Miscellaneous (surveying stamp boughs, &c.)	Testing measurements.	Examining mauzadar's papers.	Actually surveying.	Enquiring into cases.	Miscellaneous, enquiry.	All work not included in the above (census work).	Total.									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Kámrúp ..	Sadr ..	Babu Chandra Kanta Sen.	18	....	....	....	....	2	....	....	....	....	....	9	29	75	9	....	12	69	..	..	81	194	For 171 days acting as Extra Assistant Commissioner.
" ..	" ..	" Raman Krishna Biswas.	42	...	....	5	3	....	....	.. ..	....	....	....	30	80	30	1	18	4	....	..	..	22	123	For 242 days working in Lakhimpur, a non-cadastral district.
Darrang ..	Mangaldai ..	" Phanidhar Chaliha.	48	18	6	4	12	10	42	....	4	....	....	26	164	69	75	3	54	....	..	..	57	365	
Nowgong ..	Nowgong ..	" Bholanath Das..	17	....	....	16	28	....	....	....	....	....	....	29	90	115	23	23	33	10	..	..	71	209	For 66 days worked with the Settlement Department.
Sibságar ..	Jorhát ..	" Lakshmi Nath Kakati.	5	....	....	1	98	....	....	....	....	....	....	79	113	139	..	1	6	42	..	..	49	301	For 64 days ditto.
" .	Golághát ..	" Gopal Chandra Puri Bhuiyan.	....	....	....	....	....	....	....	....	....	....	....	....	..	..	..	....	....	....	..	..	..	72	
" ..	" ..	" Muneid Mushiat Ulla.	25	.. ..	....	2	10	....	....	....	....	....	....	54	114	106	52	4	25	....	..	..	29	273	For 92 days worked with the Settlement Department.
" ..	" ..	Babu Parbati Sankar Kar.	....	....	....	....	....	....	....	....	....	....	....	2	2	15	..	2	....	....	..	..	2	19	For 146 days worked in a non-cadastral district, or with the Settlement Department.

APPENDIX B.

Statement showing time spent on different kinds of work by Supervisor Kánungos.

Name of kánungo.	Number of days on tour.						Number of days doing office work.	Number of days without work.						Miscellaneous work not included in above.	Remarks.
	Running check lines.	Testing crops.	Examining mandals' papers.	Enquiring into cases.	Miscellaneous (Camps), &c.	Total.		Travelling from place to place.	Gazetted holidays.	On account of rain.	For sickness.	Leave.			
												Privilege.	Without pay.	Half pay.	
Dhiraj Deka	60	8	36	6	31	141	107	24	.....	2	23	38	.....	.....	26	
Mina Ram Das	71	29	14	16	30	160	120	14	13	.....	7	35	.....	.....	16	
Nanda Kumar Saha ..	15	16	81	29	.....	140	133	10	.....	.....	.....	.....	.....	.....	22	
Durga Ram Datta ..	31	31	10	9	.....	101	169	8	24	.....	14	5	.....	.....	24	
Ganga Ram Das	40	10	55	20	92	218	102	5	17	3	2	.....	.....	.....	18	
Dina Nath Neogi	39	.....	28	6	47	120	113	5	69	14	21	.....	.....	.....	23	
Pun Ram Mohanta ..	67	37	30	17	54	205	124	14	3	6	1	.....	.....	.....	12	
Mohesvar Das ..	107	23	19	5	49	203	118	7	5	17	15	.....	.....	.....	..	
Nitya Nanda	2	9	57	11	.....	79	39	12	4	.....	16	31	100	.....	24	
Laghnu Ram Das	29	.....	.....	17	.....	46	84	17	15	10	10	30	.....	.....	15	
Chandra Kanta Sarkar ..	26	8	93	44	.....	173	71	18	19	1	1	.....	.....	.....	22	
Basir Ali Biswas ..	42	26	72	21	.....	161	121	14	15	5	4	40	.....	.....	5	
Lakshmi Kanta Das ..	22	4	88	9	.....	124	122	13	26	2	2	.....	.....	.....	78	
Jai Ram Das	75	21	9	35	.....	140	172	3	28	7	2	.....	.....	.....	13	
Lakshmi Ram Das ..	91	15	57	50	55	268	70	3	19	.....	5	.....	.....	.....	..	
Ram Rath Datta ..	30	28	23	73	31	185	177	6	21	1	8	.....	.....	.....	17	
Sita Ram Chandhuri ..	62	25	4	12	23	127	152	24	17	1	5	29	.....	.....	..	
Tita Ram Gacul ..	4	.....	.....	9	45	58	73	66	9	7	45	.....	.....	67	28	Joined on the 14th July; absent on 8 months' sick leave from 1st November to 1st February. His successor did not keep diary for 13 days.
Krishna Das	24	7	22	28	.....	79	92	20	5	3	24	.....	.....	.....	76	
Kan Nath Das	17	8	13	5	68	111	91	15	19	18	12	30	.....	.....	..	Appointed 16th June.
Anandi Ram Das	33	12	74	4	.....	123	160	8	19	1	20	27	.....	.....	17	
Jina Ram Barua	12	18	16	21	68	135	60	15	6	15	8	.....	.....	.....	28	4 days in settlement work at Gauhátí, 9 at Gauhátí for taking health certificate, and 46 days without work. He joined his work on the 7th June 1890.
Siba Ram Barua	.....	.....	6	2	42	50	11	12	1	.....	1	.....	.....	.....	6	

A. S. Press (P. & R.) No. 135—250—2-10-91.

Remarks on the Report of the Department of Land Records and Agriculture, Assam, for 1890-91.

It is requested that any reply or future reference to this communication may quote its No., distinguishing letter, and date.

No. 4054R.

FROM

THE OFFG. SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM,

TO

THE DIRECTOR OF THE DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

Shillong, the 4th November 1891.

SIR,

I AM directed by the Chief Commissioner to communicate the following remarks upon the Report on the Operations of the Department of Land Records and Agriculture in Assam during the year 1890-91, which is embodied in your office letter No. 2086, dated the 30th July 1891.

As observed in paragraph 1, the present report has been drawn up by your *locum tenens*, Rai Sarat Chandra Banerji, Bahadur, under Mr. Ward's personal supervision, and some changes in the plan and arrangement of the report have been made under his orders. Paragraphs 2 to 12, as they now stand, deal with matters not dealt with in the Land Revenue Report of the Province, or in the Annual Report on Survey and Settlement Operations in Assam. The remainder of the report gives information under the different headings prescribed by the Government of India in their circular No. 54A, dated the 28th April 1884.

2. *Paragraph 4.*—It is gathered from this paragraph that you were 140 days on tour, and left the Province on furlough on the 13th February 1891, making over charge to the Assistant Secretary to the Chief Commissioner. Practically, therefore, the Province was without a Director for the last six weeks of the year. You were also for three weeks, while on tour, unavoidably employed entirely on special work connected with the Lushai expedition. This probably explains why you made no inspections in any of the districts of the Assam Valley above Mangaldai. I am to say that the Chief Commissioner hopes that you will be able to visit all these districts during the cold weather of the current year.

3. *Paragraph 5.*—The statement showing the touring done by Sub-Deputy-Collectors given in this paragraph is incomplete. In future, the touring done by all Sub-Deputy-Collectors in the Province should be noticed, and not merely by those appointed to subdivisions brought under cadastral survey. A column should also be added to the statement showing for how many days in the year they were in charge of the different subdivisions to which they were appointed. I am to say that the Chief

Commissioner is by no means satisfied with the amount of touring work done by these officers as a body. In Mr. Ward's opinion 150 days is the minimum period which a Sub-Deputy Collector should spend on tour, as in less than this it is impossible for him to carry out effectually all the duties which devolve upon him as laid down in the rules relating to the proper maintenance of settlement records in cadastrally surveyed mauzas, issued with the Chief Commissioner's Circular No. 31, dated the 28th June 1887, and revised in July 1889. I am to point out that, although there is no objection to Sub-Deputy Collectors being employed occasionally on judicial work when they have time to spare for it, it must always be borne in mind that these officers were appointed mainly for the purpose of supervising survey and settlement operations, and the maintenance of settlement records; this, therefore, must always be regarded as their principal duty. The tendency of some District Officers to keep their Sub-Deputy Collectors at head-quarters trying cases at a time when they should be on tour must therefore be checked. In this connection I am to observe that it seems doubtful whether Deputy Commissioners and their Subdivisional Officers fully recognize their responsibilities, as laid down in the circular quoted above, in looking after the work of Sub-Deputy Collectors. The attention of the Commissioner, Assam Valley Districts, will be drawn to this matter.

4. *Paragraph 6.*—The statement given in this paragraph showing the touring work of kánungos is also defective, inasmuch as it does not show for what portion of the year each kánungo was in charge. The statement shows that five kánungos were on tour for less than 100 days. It is explained that they were in charge during only a portion of the year, but as the exact period for which they were in charge is not stated, it is impossible for the Chief Commissioner to decide how far this explanation is sufficient. Ten others, not seven as stated in the report, were on tour for less than 150 days, but, although this period is quite insufficient, no explanation is given as to why they did not spend a longer time on tour. Only 8 out of the 23 kánungos employed during the year were on tour for more than 150 days, and only 4 for more than 200 days. I am to request that in future the explanation of the Sub-Deputy Collector concerned should be given in the case of every kánungo who is on tour for a shorter period than 200 days. I am further to point out that under the rules of 1889 referred to above the Sub-Deputy Collector is primarily responsible for seeing that the kánungos do what is required of them by those rules, and that it is the duty of District Officers to see that the Sub-Deputy Collectors act up to their responsibilities in this respect.

5. The work done by Sub-Deputy Collectors and kánungos while on tour is not shown in the report. The test measurements carried out by them are noticed in the Provincial Land Revenue Report, and the number of days spent on other kinds of work is shown in Appendices A and B to your office report, but nothing is said in either report as to the quality of the work done, nor whether during the past year they have acted up to the rules issued for their guidance. From such enquiries as Mr. Ward has been able to make, it would seem that you have no information on these points in your office; you have not during the past year been able to inspect the work done by these officers in the upper districts of the Assam Valley, and there is nothing in the report to show that any Subdivisional Officer or Deputy Commissioner has in any way supervised their work. Under the circumstances, Mr. Ward can attach no value to the information given in Appendices A and B. It is, however, absolutely necessary that the Chief Commissioner should have information every year, showing how far Sub-Deputy Collectors and supervisor and registrar kánungos are acting up to the rules which have been issued for their guidance, and as the proper officers to supply this information are the District and Subdivisional Officers, who are immediately responsible for seeing those rules carried out, I am to request you either to arrange to get this information from them direct or through the Commissioner of the Assam Valley Districts. I am to add that, so far as the Chief Commissioner can see at present, it would appear to be advisable to leave the subjects discussed in paragraphs 5 to 12 inclusive of this report to be dealt with entirely by the Commissioner in his Annual Land Revenue Report along with the subject of test measurements, the Commissioner being the officer primarily responsible for seeing that District and Subdivisional Officers exercise proper supervision over the work done by Sub-Deputy Collectors, kánungos, tahsildárs, mauzadárs, and mandals, and that the rules issued in 1889 for the guidance of all these officers are strictly enforced. I am to request you to submit a report on this suggestion after discussing the matter with the Commissioner.

6. *Paragraph 11.*—I am to observe that the Chief Commissioner attaches great importance to your inspection of mandals' records, and to say that, if possible, you should arrange to visit annually every subdivision in the Assam Valley for the purpose of

inspecting such papers, and seeing that they are kept up on some uniform system. Circular No. 31, dated the 28th June 1887, clearly defines what your duties are in this respect and lays down the procedure under which you should communicate to the Commissioner of the Assam Valley Districts and District Officers any mistakes, &c., which you may discover. Having done this, the responsibility lies with the District and Subdivisional Officer and the Sub-Deputy Collector attached to each subdivision to see that these mistakes are not allowed to recur. In future, I am to request you will summarise in your report the result of your inspection of each subdivision, and show how far the rules which have been issued for the preparation and maintenance of village records have been observed.

I have the honour to be,

SIR,

Your most obedient Servant,

E. A. GAIT,

Offg. Secretary to the Chief Commissioner of Assam.

No. 4055R.

Shillong, the 4th November 1891.

COPY, with a copy of the report, forwarded to the Commissioner of the Assam Valley Districts for information, with the request that he will draw the special attention of all Deputy Commissioners and Subdivisional Officers to the remarks made above. The Commissioner's opinion is also requested on the question raised in paragraph 5 of the letter.

By order of the Chief Commissioner of Assam,

E. A. GAIT,

Offg. Secretary to the Chief Commissioner of Assam.

A. S. Press (Revenue) No. 63—260+40—5-11-91.

ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

FOR

1891-92.

By H. Z. DARRAH, M.C.S.,
DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE.

132915

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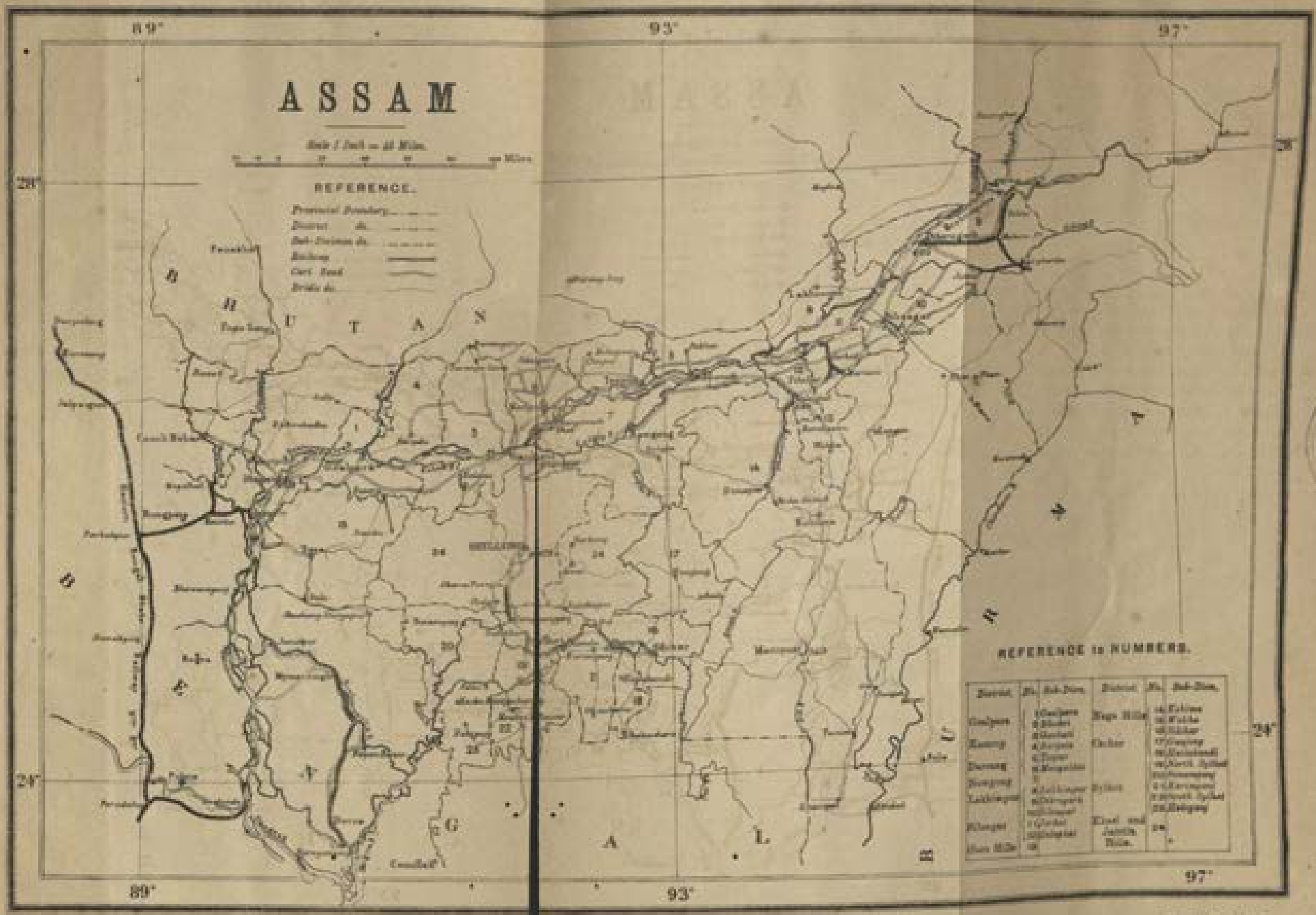
ASSAM
89°
93°
97°
28°
24°
REFERENCE.
BHUTAN
REFERENCE to NUMBERS.

ANNUAL REPORT OF THE DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM, FOR 1891-92.

No. 1879S., dated Shillong, the 20th June 1892.

From—H. Z. DARRAH, Esq., I.C.S., Director, Department of Land Records and Agriculture, Assam,

To—The Secretary to the Chief Commissioner of Assam.

SIR,

I have the honour to submit herewith the Ninth Annual Report, giving an account of the operations of the department under my control during the year ending 31st March 1892. The arrangement of the report is the same as that adopted last year under the direct orders of the Chief Commissioner, and its length has been reduced as much as possible.

Directors.

2. When the year opened the department was without a head, as I was absent on furlough, and Mr. Cossins, who had been nominated as my successor, had been killed at Manipur on the 24th of March. For some months Mr. LeMesurier, Assistant Secretary, carried on the more urgent current duties of my office in addition to his own, and on the 7th of July Rai Sarat Chandra Banerji Bahadur, Settlement Officer with the Cadastral Survey Party, was appointed to officiate in addition to his own duties. These latter were too onerous to allow him much time for the new work unexpectedly placed in his hands, and it was with no little difficulty that he succeeded in keeping the settlement office up to the mark, while issuing the reports and returns which occupy so much of the Director's time during the summer months.

Reports.

3. The Rai Bahadur issued the following reports before the close of October 1891 :

(1) Annual Departmental Report.
(2) Annual River-borne Trade Report.
(3) The Provincial Land Revenue Report.

Besides these, the usual monthly foreign trade figures and the quarterly reports on river-borne trade were regularly published. The annual Settlement Report was issued by me in January 1892.

Tours of Director.

4. I returned from furlough, under the orders of the Government of India, on the 18th of October, and was engaged for a month in endeavouring to reduce to some order an office demoralised by the events of the earlier part of the year, and the inefficient control of a singularly incompetent head clerk. The condition of my office handicapped me considerably all through the winter and naturally had an injurious effect on my inspection duties. On the 18th of November I started on my tour and inspected first the progress of settlement operations in Pratabgarh. The state of things there has been described in the last Settlement Report and further notice is not here required. On the 2nd of December I met the Chief Commissioner at Sylhet and laid before him several local matters which required discussion with the Deputy Commissioner. From the 12th of December to the 30th, I was touring in the Jaintia parganas, which are to come under cadastral survey next season, with a view to seeing something of the local conditions on which the work will have to be done. On the 4th of January I left Sylhet *en route* for Gauhati, where I arrived on the 11th. After a few days here, during which the Survey School examination for first-class certificates was held, I started for a tour on the north bank of the Brahmaputra, visiting Hajo, Nalbari, Bojali, and Rangia. At the last named place I spent five days examining some tahsildars in practical surveying. On the 6th of February I reached Gauhati, and next day started up the river with the Chief Commissioner, inspecting the Mangaldai mandals *en route*. On the 17th of February I arrived at Sibsagar, and marched thence through Jorhat and Golaghat to Nigriting, where on the 2nd of March I took steamer for Tezpur. From this station I inspected the survey camp at Holeswar, and on the 5th crossed the river to Silghat, and marched through Nowgong to Gauhati. On the 22nd I went up to Shillong to arrange some urgent matters that had to be completed before the close of the official year, and on the 27th

returned to Gauhati. On the 30th of March I. started for the comparatively unknown *mauzas* of Uttar and Dokin Borketri, where I was at work inspecting mandals'. papers when the year closed.

Thus I was *on tour* for 130 days out of the 165 days which elapsed after I returned from furlough. No touring was done by the Rai Bahadur during the 86 days he officiated.

5. The touring done by the Sub-Deputy Collectors is shown in the following statement:

Tours of Sub-Deputy Collectors.

District.	Subdivision.	Name of Sub-Deputy Collector.	Number of days in charge.	Number of days on tour.		
				In cadastrally surveyed mauzas.	In non-cadastral mauzas.	Total
Kamrup ...	Sadr	Raman Krishna Biswas ...	223	67	1	68
	,, ...	Mussiat Ullah	143	93	3	96
	Barpeta ...	No Sub-Deputy Collector.				
Darrang ...	Tezpur... ...	Krishna Chandra Chaudhuri ...	147	.....	93	93
	Mangaldai ...	Phanidhar Chaliha	232	58	85	123
	,, ...	Raman Krishna Biswas ...	134	51	4	55
Nowgong ...	Nowgong ...	Bhola Nath Das	366	143	14	157
Sibsagar ...	Sadr	Phanidhar Chaliha	134	56	9	65
	,, ...	Mussiat Ullah	123	7	.....	7
	Golaghat ...	Parbati Sankar Kar	366	145	17	162
	Jorhat ...	Lakshminath Kakati ...	366	113	25	138
Lakhimpur ...	Dibrugarh ...	Jogeswar Barkataki ...	113	.....	65	65
	North Lakhimpur ...	Krishna Chandra Chaudhuri ...	219	.....	3	3
Goalpara ...	Dhubri ...	Jogeswar Barkataki ...	253	.....	15	15

Babu Raman Krishna Biswas was in Kamrup till the 9th of November 1891, when he was transferred to Mangaldai. He died on the 23rd of March. Munshi Mussiat Ullah was transferred to district work from his settlement duties on the 9th of July 1891 and posted to the district of Sibsagar, sadr subdivision. He was mainly engaged in office work while there, as the new papers from the settlement office were coming in during the hot weather and rains, when field work was impossible. He was transferred to the Kamrup district on the 9th of November 1891, and out of 143 days there was on tour for 96 days. The two Sub-Deputy Collectors did together 2·74 linear miles of pertal per square mile of fluctuating cultivation. This area in Kamrup is so great that the large number of linear miles of check line run (84·44) bears but the above small proportion to it. I saw a good deal of Mussiat Ullah's work while inspecting in that district, and found it on the whole satisfactory. The map which accompanies his report shows that his and Raman Krishna's halting stages taken together were fairly well scattered. One camp, however, should have been fixed for the southern end of Namborbhag. Krishna Chandra Chaudhuri was in the North Lakhimpur subdivision till the 6th of November, when he was transferred to Tezpur. He was mainly employed in testing the measurements of mauzadars. I did not inspect his work, as, owing to the cadastral survey going on during the year in the area under his charge, the mauzadars' papers will be replaced in 1893-94 by those from the Cadastral Settlement Office, and it would have been no use examining documents which will become obsolete so soon.

Phanidhar Chaliha was 123 days on tour in Mangaldai and 65 days in Sibsagar. He paid special attention to the preservation of the theodolite stations, and the excellent mounds to be seen in the Mangaldai subdivision are the result mainly of his exertions. His time in Sibsagar was principally spent in the necessary work of teaching the mandals and kanungos, most of whom were new to the duties now required of them.

Bhola Nath Das was in charge of Nowgong for the whole year. His diary shows 157 days spent on tour. My inspection of the Nowgong papers disclosed very unsatisfactory work, which was specially reported to the Chief Commissioner. The Sub-Deputy Collector's promotion has been stopped till further orders, and he is to be transferred to another district, as the fact of his home being in Nowgong has been found most prejudicial to his work.

Parbati Sankar Kar is one of the most junior of the Sub-Deputy Collectors, and is only learning his work. He was nominally attached to the Golaghat subdivision

throughout the year, but was at the survey camp near Tezpur from the 13th of February to the 26th of March learning to survey.

He was on tour in the Golaghat subdivision for 162 days, and ran 6·09 linear miles of pertal. There is so little fluctuating cultivation in Golaghat that this small mileage brings out a result of 1·44 linear miles of check line per square mile of the fluctuating area.

Lakshminath Kakati was in the Jorhat subdivision for the whole year. He was only on tour for 138 days, but was for some time employed as munsif and treasury officer owing to the extra work caused by the Manipur disaster and the subsequent illness of Mr. More, the Jorhat Extra Assistant Commissioner. He ran 4·98 linear miles of check line per square mile of the fluctuating area. His work on the whole, considering his numerous interruptions, was satisfactory.

Jogeswar Barkataki, the newest of the Sub-Deputy Collectors, was attached to the sadr subdivision of the Goalpara district till the 9th of December 1891, when he was transferred to Dibrugarh. At Goalpara he appears to have acted as the head of the Deputy Commissioner's Revenue Office, and at Dibrugarh he was principally employed in testing mauzadars' measurements. An abstract from the diary books of the Sub-Deputy Collectors is given in Appendix A and details of the work done during the year in Appendix B.

Tours of kanungos.

6. The statement below shows the number of days spent by each supervisor kanungo on tour:

District.	Subdivision.	Name of kanungo.	Number of days in charge.	Number of days on tour.	Remarks.
1	2	3	4	5	6
1. Kamrup ...	Gauhati ...	Ganga Ram (Palasbari) ...	366	174	
2. ,, ...	,, ...	Krishna Das (Boroma) ...	34	12	
3. ,, ...	,, ...	Kalamoni ,, ...	332	237	
4. ,, ...	,, ...	Radha Kishur (Nalbari) ...	323	151	
5. ,, ...	,, ...	Tita Ram Gogoi ,, ...	43	15	
6. ,, ...	,, ...	Laghnu Ram (Hajo) ...	234	111	From 11th August.
7. ,, ...	,, ...	Shibnath	132	.....	Not available in time.
8. ,, ...	,, ...	Konnath (Pandurí) ...	366	185	
9. ,, ...	,, ...	Lolit Ram (Borigog) ...	92	61	
10. ,, ...	,, ...	Moni Ram (ditto) ...	138	96	
11. ,, ...	,, ...	Dinanath Neogi (ditto)—Dead ...	136	80	
12. ,, ...	,, ...	Dhir Singh (Tambulpur) ...	366	135	
13. ,, ...	,, ...	Jina Ram (Pati Darrang) ...	366	187	
14. ,, ...	,, ...	Gonarath (Beltola)	292	148	
15. ,, ...	,, ...	Nityananda (ditto) ...	74	53	
16. ,, ...	Barpeta ...	Mina Ram (Bojali)	366	200	
17. ,, ...	,, ...	Bhoghirath (Rohal	198	152	Made into a circle from 15th September 1891.
18. Darrang ...	Mangaldai	Chandra Kant Sarkar	366	191	
19. ,, ...	,, ...	Doya Ram Das	366	180	
20. ,, ...	,, ...	Basir Ali	366	170	
21. Nowgong ...	Nowgong	Sisu Ram Chaudhuri	366	181	
22. ,, ...	,, ...	Jai Ram	96	5	
23. ,, ...	,, ...	Ananda Ram Gogoi, offg. ...	270	105	
24. ,, ...	,, ...	Lakshmi Ram Das	366	201	
25. ,, ...	,, ...	Ramrath Datt	366	203	
26. Sibsagar ...	Sadr ...	Tita Ram Gogoi	323	80	
27. ,, ...	,, ...	Lakshmi Kanta Das	366	168	
28. ,, ...	,, ...	Meheruddin Bora	318	73	
29. ,, ...	Golaghat ...	Maheswar Das	366	183	
30. ,, ...	,, ...	Pua Ram Mohunta	366	245	
31. ,, ...	Jorhat ...	Krishna Das	332	88	
32. ,, ...	,, ...	Nanda Kumar Naha	366	120	
33. ,, ...	,, ...	Durga Ram Datt	366	136	

I inspected the papers of every one of the foregoing during the year. The only men who were on tour for the required period of 200 days or more were Pua Ram, Kalamoni, Lakshmi Ram, and Mina Ram, but amongst the others, although they have not shown a sufficiently long period on tour, the work of the following proved on examination to have been well done:—Lagnu Ram, Konnath, Dhir Singh, Bhoghirath, Sisu Ram, and Maheswar. Lagnu Ram was deputed in the cold weather of 1890-91 to complete the experimental survey in Barpeta, and he did not rejoin his circle till August, so that he was only 234 days in charge. Konnath, Sisu Ram, and Maheswar almost completed the required minimum. Dhir Singh should have been longer on tour,

but the condition of his papers was creditable. Bhoghirath was on tour for 152 days out of 198. Care has always been taken in appointing these men to give them circles as far as possible from their homes, and it is worthy of notice that the men who have worked best during the year are, with the exception of Lagnu Ram, inhabitants of districts other than those they are employed in. The men whose work was found most indifferent were Ananda Ram Gogoi, Jina Ram, Doya Ram Das, Tita Ram Gogoi, and Krishna Das, and these had all succeeded in getting circles in which their own homes were situated. Since the close of the year this state of things has been changed; Ananda Ram and Doya Ram have reverted to their substantive posts, Jina Ram and Tita Ram have been transferred, and Krishna Das dismissed. No explanation has been furnished by the Sub-Deputy Collectors concerned as to other kanungos who did not complete the prescribed period of touring, except in the case of Sibsagar, where, owing to the late receipt of the new papers from the settlement office, the touring was necessarily curtailed. Details from the diary books of the kanungos are given in Appendix C, and particulars of the work done by them in Appendix D.

New kanungos.

7. Out of the area cadastrally surveyed in 1890-91 in Kamrup and Nowgong, amounting to 781·00 square miles, for which the first settlement on cadastral survey results will be made during the current year, seven new supervisor kanungos' circles were formed. Including the area of the experimental survey in Barpeta (111·64 square miles), the following table gives the average size of the kanungos' circles in each district as they now stand. The average area of the Nowgong circles has been considerably reduced, owing to the fluctuating nature of the cultivation with which the kanungos will there have to deal.

District.	Total cadastrally surveyed area in square miles.	Total number of kanungos.	Average *hâirâj* area in square miles.			Average *nâibâirâj* area in square miles.	Average *nâibâirâj* area in square miles.	Average waste land grants in square miles.	Total average area in square miles.
			Cultivation.	Waste.	Total.				
Kamrup	1650·63	14	43·71	56·15	99·86	14·42	3·22	0·40	117·90
Darrang (Mangaldai) ...	547·02	3	66·65	90·40	157·05	16·44	1·62	7·21	182·32
Nowgong	1002·99	8	48·88	72·09	120·97	0·94	0·38	3·08	125·37
Sibsagar	1370·48	8	74·48	65·15	139·63	0·80	1·94	28·94	171·31

Grading of mandals.

8. The scheme for raising the pay of the mandals in the first and second grades from Rs. 10 and 8 to Rs. 12 and 9 was introduced during the year under report in Kamrup, Nowgong, Darrang, and Sibsagar. It will be introduced into Lakhimpur during the current year. The table below shows the grading as it stood on the 1st of April 1892, and compares these figures with those of the previous year and the sanctioned scale:

Name of subdivision.	Sanctioned according to the revised scale, 1890-91.				Scale on the 1st April 1891.				Scale on the 1st April 1892.				Increase during the year.			
	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.
Goalpara ...	5	7	13	25	...	3	22	25	...	3	23	26	...	...	+1	+1
Kâmrup ...	56	84	140	280	23	94	162	279*	25	84	170	279*	+2	−10	+8	...
Darrang * ...	30	45	75	150	19	44	80	143	18	41	84	143	−1	−3	+4	...
Nowgong ...	34	51	85	170	29	8	124	161	29	6	126	161	...	−2	+2	...
Sibsagar ...	39	58	97	194	13	21	163	197	14	23	158	195	+1	+2	−5	−2
Lakhimpur ...	24	36	60	120	7	6	83	96	6	8	82	96	−1	+2	−1	...

* The five mandals of Bultollah, being paid by the mauzadar, are not here shown.

It is difficult to get men qualified for the first grade, and hence in every district the numbers in that grade are much below the sanctioned scale.

Map tubes.

9. Map tubes of zinc were provided during the year under report for districts in which the cadastral survey party had worked. As 50 copies of each sheet are printed, one tube is required for each group of sheets. The number of sheets sent to or required in each district, including the

area cadastrally surveyed in 1890-91, and therefore the number of tubes provided, is shown in the statement below:

District.	Number of sheets.
Kamrup	2,206
Nowgong	1,273
Mangaldai	887
Tezpur	187
Sibsagâr sadr	807
Golaghat	397
Jorhat	673
Total	6,430

The total cost of these tubes landed at the stations where they were required was Rs. 3,942-10-9, thus:

	Rs.	a.	p.
Price of tubes	3,215	0	0
Packing	310	8	0
Freight	417	2	9
Total	3,942	10	9

Racks.

10. To stack the map tubes, so that they might occupy the minimum of space, and yet be easily accessible, iron racks were constructed in the Public Works Department workshops at Gauhati of dimensions varying with the necessities of each district. Most of these have been put up at the places named below, but one or two are still in course of erection. The capacity of each is indicated in the statement below:

Kamrup, 2½ racks	to hold	2,070 tubes.
Nowgong, 1½ racks	,,	1,242 ,,
Mangaldai, 1 rack	,,	828 ,,
Sibsagar sadr, 1 rack	,,	828 ,,

The total expenditure for the above comes to Rs. 1,508.

Racks for Jorhat and Golaghat, at which only temporary arrangements to store the tubes have been made, will be constructed later on. Tezpur will not require a rack.

Furniture.

11. The mandals of the Kamrup kanungos' circles were provided during the year with 21 sets of furniture, each set consisting of one table and 2 benches to accommodate ten mandals. Nine sets of similar furniture were sent to Mangaldai. The total cost of the 30 sets landed at the places at which they are required came to Rs. 1,171. The following list gives details:

	Rs.	a.	Rs.	a.
(1) Tables	30 @ 19	8 =	585	0
(2) Benches	60 ,, 7	2 =	427	8
(3) Stools (for kanungos)	15 ,, 1	8 =	22	8
(4) Ties (60) and nails (240) to strengthen the tables ...			18	8
(5) Carriage to destination			117	8
			1,171	0

House accommodation.

12. The scheme for providing mandals with house accommodation during the time they are engaged in preparing the annual settlement papers is still under consideration, as no action was taken during my absence on furlough. Sites have been selected at most of the stations, and estimates of cost are being prepared.

Barpeta experiment.

13. The Barpeta experimental survey, begun in the cold weather of 1889-90 was separately reported on during 1890. The second season's work was done during the field season of 1890-91 and the previous year's operations revised where necessary. No separate report

having been published in 1891, it is necessary here to give final figures. During the second season the total area surveyed came to 58·89 square miles, of which 3·42 square miles is settled land and 55·47 square miles is waste. The total cost of the second season's work, down to the completion of the settlement in the summer of 1891, was Rs. 1,306-5-10, which gives an all-round rate of Rs. 22·18 per square mile. The net increase in revenue was Rs. 334, or 25·57 per cent. on the expenditure incurred.

Taking the experiment as a whole, the total area done amounted to 111·64 square miles, of which 19·46 square miles, or 17·43 per cent., was settled and the rest waste. The total cost of the whole series of operations, which began with boundary survey done with the sight rule and went on through demarcation and cadastral survey to the assessment of the total area surveyed on cadastral results, and the final completion of all the papers, was Rs. 5,626-6-0. This, it is to be remembered, includes revision of the first year's work and final assessment on the result of the second. The rate for the whole area is Rs. 50·45 per square mile, being Rs. 11·30 for boundary and Rs. 39·15 for cadastral survey. In paragraph 61 of my report on the first year's operations of the Barpeta experiment, dated the 26th July 1890, I estimated that "the final cost of the cadastral survey and assessment to revenue of the whole area would be only Rs. 46·75 per square mile. Including the preliminary traverse, the whole cost of the entire survey and final settlement will probably not amount to Rs. 58 a square mile." This prediction has been fulfilled in all particulars. The net increase in revenue resulting from the whole survey amounts to Rs. 1,378, or a return of 24·48 per cent. on the expenditure incurred. I was a little doubtful when the maps were first prepared as to how far they would stand the usage they were subsequently bound to experience. But my last visit to the subdivision quickly reassured me on this point. The following is an extract from my inspection note forwarded to the Deputy Commissioner:

I examined all the maps and a number of the *dág chittas, jamabandis,* abstract books, &c., of the area included in the Barpeta experimental survey of 1889-90 and 1890-91. Those of the former season are in their third and those of the latter in their second year of use. But for some erasures in the numbering owing to mistakes in the first year's work, and for the marks on some of dirty hands, the maps of the earlier year are in excellent condition. Those of the second season, having been made by men who had gained their experience in 1889-90, are very clean and neat, and nothing better could be required as a basis for assessment. It was at first doubtful as to how far the maps would bear the rubbing out of pencil marks, and the constant handling necessary for the annual calculation of areas. For, these maps not having been printed, no copies are available for the use of the mandals, and all changes in cultivation and crops have annually to be shown on the original sheets. It is satisfactory, therefore, to find that, even where, owing to inexperience in manipulation, the maps were needlessly dirtied during the first year, and owing to the improper inking in of fluctuating fields and mistakes in numbering, many of the inked lines and numbers have had to be erased, these damaged sheets have all the appearance of being likely to last for some years longer. Where the above mentioned injuries had not been done to the sheets of the earlier season, and in the case of all the sheets of the second season, it may, I think, be safely predicated that the maps will be fit for use for many years to come.

Since the close of the year, a tracing glass has been supplied to the subdivision, so that the mandals will in future use traced copies, and the originals will be filed with the registrar kanungo.

14. The Gauhati Survey School did good work throughout the year. The statement below gives details as to number of pupils who passed and the average cost of each:

Survey School.

Year.	Number of men who received first class certificates.					Number of men who received second-class certificates.				Total passed.	Total cost of the school.	Total receipts.	Net cost.	Average net cost of each passed pupil.
	Tahsildars.	Mauzadars.	Mandals.	Candidates.	Total.	Mauzadars.	Mandals.	Candidates.	Total.					
											Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1890-91	..	..	1	2	3	....	21	95	116	119	1,170 5 0	772 0 0	498 5 0	4 3 0
1891-92 . ..	3	1	10	12	26*	1	24	63	88†	114	1,569 11 4‡	1,370 0 0§	199 11 4	1 3 3

* Besides these three mandals and three candidates who did not read at the school also passed.
† Besides these one mandal and six candidates who did not read at the school also passed.
‡ Includes (1) Teacher Rs. 875-1-7.5 ‖ Receipts—
(2) Servants „ 84-0-0 (1) Schooling fees Rs. 1,148
(3) Contingencies „ 110-9-9 (2) Examination „ „ 222
(4) Repairs „ 500-0-0
„ 1,569-11-4 „ „ 1,370

§ Pay Rs. 689-1-7. Rewards Rs. 188-0-0.

The cost of each passed pupil fell to Re. 1-3-3, so that the school is almost self supporting. But for the fact that a sum of Rs. 500 had to be drawn at the close of March for repairs which have been executed since, there would have been a profit to Government of Rs. 300-4-8. The rewards paid to the teachers amounted last year to Rs. 188. The fees from pupils reached the very large total of Rs. 1,370. The Head Survey Master, Babu Pravat Chandra Saraswati, deserves credit for the success which has attended the school. The Second Master, Modhu Ram, has only been at work since July 1891, but has done well.

Two examinations for first-class certificates were held by me personally in January and April. The latter does not fall strictly within the scope of this report, but is practically part of the cold-weather work, and may be dealt with here. At these two examinations, one tahsildar, five mandals, and six candidates passed out of 52 examinees. The examination was made biennial in order to allow as many tahsildars as possible to pass, but, notwithstanding the additional facilities offered, only 3 tahsildars appeared.

Qualified subordinate officials.

15. The statement below gives details as to the number of qualified tahsildars, mauzadars, and mandals in existence at the close of the year under report as compared with the preceding year:

District.	Total number on 31st March 1892.			Number exempted on 31st March 1892.		Men with first-class certificates on 31st March 1892						Men with second-class certificates on 31st March 1892.					
	Tahsildars.	Mauzadars.	Mandals.	Tahsildars.	Mauzadars.	Tahsildars.		Mauzadars.		Mandals.		Candidates.	Tahsildars.		Mauzadars.		Mandals.		Candidates.
						1891.	1892.	1891.	1892.	1891.	1892.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1892.
Goalpara ..	..	12	20	..	4	..	..	..	..	..	..	..	..	..	..	3	3	15	..
Kamrup ..	12	71	274	1	..	12	2	5	5	25	35	5	13	..	..	1	3	235	235	244
Darrang ..	4	24	121	..	3	9	1	2	2	3	10	11	1	..	..	7	6	109	110	26	26
Nowgong ..	..	..	207	103	..	..	..	..	..	3	6	20	32	..	2	..	7	4	72	85	37	52
Sibsagar ..	..	15	195	..	9	..	..	..	..	4	2	13	37	..	..	..	20	24	77	84	..	4
Lakhimpur ..	..	40	96	..	..	..	..	..	..	..	1	7	6	..	..	..	..	1	6	8	..	..
Total ..	..	163	905	3	16	21	3	7	14	16	107	121	6	16	..	..	47	41	573	537	327	322

Special examination.

16. Beside the above mentioned examinations for first-class certificates, I examined eight tahsildars at Rangia in practical surveying for the certificate prescribed by the Chief Commissioner in his Secretary's No. 2026, dated the 10th of July 1888, to the address of the Commissioner, Assam Valley Districts. Of these men four passed.

Divisions of report.

17. The paragraphs below deal with the headings prescribed by the Government of India in Circular No. 54A., dated the 28th April 1884.

I.—Organisation and Maintenance of Village Records.

Village papers.

18. The area cadastrally surveyed in 1889-90 was settled during the year under report on the results of the survey. This added 713·49 square miles to that previously done, so that the total area, including the 111·64 square miles of the Barpeta experiment, settled on the results of cadastral survey now amounts to 3,790·12 square miles, distributed as follows:

Kamrup ...	...	...	...	1,286·03	square miles.
Darrang ...	...	...	...	547·02	,,
Nowgong ..	...	...	...	586·59	,,
Sibsagar ...	...	...	...	1,370·48	,,
				3,790·12	,,

I inspected during my cold-weather tour the village papers of all but one mauza of this area, and personally examined almost every map. Detailed inspection notes were written for each district, pointing out any irregularities discovered, and drawing attention to the direction in which action seemed to be required. The following is a brief account of the condition of the papers in each district.

Kamrup.—The papers on the whole were not satisfactory. An inexperienced Sub-Deputy Collector had been in charge for the greater part of the year, and some of the kanungos and many of the mandals had neglected their work. None of the theodolite stations in this district except trijunction points of villages having been marked, the kanungos had been directed to erect mounds in tracts of fluctuating cultivation as a guide to the mandals in surveying. This duty had not been efficiently carried out.

Mounds erected in jungle areas had also been systematically neglected. The crop registers were mostly in confusion. Many of the maps showed careless surveying. The worst feature was, however, the condition of the registrar kanungo's office, which was deplorable owing to gross neglect of his duty by the former incumbent. Registers were in arrears, or not kept up, and no proper list of instruments was in existence. The new registrar appointed a short time before my inspection was endeavouring to put the office in order at the time of my visit. On the other hand, in some kanungos' circles, *e.g.*, Mina Ram's, Konnath's, Dhir Singh's, and Bhoghirath's, the papers were in good order. Bhoghirath's circle embraces the area of the Barpeta experimental survey, and it was satisfactory to find that the fears entertained at first about the maps wearing out in a couple of years were altogether unfounded. I was surprised, indeed, to find them in as good condition as that in which I saw them.

Darrang.—The cadastral papers are all in the Mangaldai subdivision, and were examined at headquarters. They were, except in one kanungo's circle, in fair order on the whole. Most of the theodolite stations in the subdivision appear to have been marked with good mounds by the former Sub-Deputy Collector, Phanidhar Chaliha, but their inspection, which is an annual duty, had been greatly neglected by both mandals and kanungos. At headquarters there had been most serious carelessness in looking after the instruments and printed copies of the maps. Of the former the upper parts of 23 plane-tables had been eaten by whiteants, and of the latter no less than 3,016 sheets had been completely destroyed by the same insects. A special report was called for, and the case subsequently reported to the Chief Commissioner.

Nowgong.—In this district the state of things was very unsatisfactory, owing mainly to neglect of his duty by the Sub-Deputy Collector, whose slackness communicated itself to all his subordinates. The rules of 1889 had been most indifferently carried out. The Sub-Deputy Collector, who has been in the district for over $1\frac{1}{2}$ years, had left unvisited a large number of mandals' circles. Printed maps had been left lying in the office for two years while the mandals used the old, almost worn out traces first supplied. Changes in cultivation, instead of being plotted fresh each year, were, I found, frequently copied from the previous year's map. As in Mangaldai, the inspection of theodolite stations had been seriously neglected. The *dariabadi* settlement had not been completed when I left the district in the middle of March. The Sub-Deputy Collector's clerk had been promoted to a kanungoship, and, though the very first qualification of a supervisor kanungo is knowledge of survey, I found that this man did not know even how to use an optical square.

Sibsagar.—All through this district the regular and supplementary settlements were delayed owing to the impossibility of completing in the settlement office the passing of the maps which contained grants and portions of grants, and it was therefore difficult, especially in the sadr subdivision, to judge properly how far the condition of the papers was due to remissness on the part of mandals and kanungos. The difficulty was still further increased by the dislocation of regular work, resulting from the necessity of employing the ordinary revenue staff of the district in arranging for passing troops through to Kohima for the Manipur expedition. In the sadr subdivision very few even of the printed maps which had arrived had been issued, and a large amount of the new cultivation had been left over to be measured for the supplementary settlement. In Jorhat matters were more advanced, but here some reprehensible errors had been allowed in the survey of new lands, and in many instances the rules of 1889 had been disregarded. Here, as well as in the Golaghat subdivision, the supervisor kanungos appear to have been too much employed in enquiring into cases.

Unsurveyed areas.

19. The more settled portions of the Tezpur, North Lakhimpur, and Dibrugarh subdivisions having been under survey during the close of the year under report it was of course useless to examine the mandals' papers. The total settled area which is now left unsurveyed in the Assam Valley has been estimated at 700 square miles, but this, being made up by adding together the areas of several blocks scattered all over the valley, necessarily contains a very large amount of waste. I propose to have maps prepared for this area on the system which proved successful at the Barpeta experiment. When this is done, there will be no settled land in the Assam Valley left unsurveyed.

20. The maintenance of the maps is largely bound up with the maintenance of theodolite station marks, and a special report as to the inspection of these stations is annually forwarded by Deputy Commissioners in July. This date has been fixed because many of the stations are situated in heavy jungle, and cannot properly be inspected until the jungle fires of the cold weather and the comparative dryness of March and April have rendered the country easy to traverse in unfrequented directions. Also because it has been found by experience that it is almost useless planting semal boughs before the beginning of the rains in April gives them an opportunity to strike root. In Appendix E details are given showing what was done in April, May, and June of 1891. The figures showing totals are not yet quite accurate, as many stations have been counted twice over owing to their position on the boundary of two kanungos' circles. This will be corrected in time. The extreme importance of preserving these theodolite station marks has been prominently brought to the notice of all Deputy Commissioners, and special attention was paid to the point during all my inspections. It is hoped that future reports will exhibit an improvement in the matter of showing stations permanently marked once for all.

Maintenance of theodolite stations.

21. The statement below shows briefly the work done by Sub-Deputy Collectors in the inspection of mandals' papers and maps during the year:

Sub-Deputy Collectors' inspections.

District.	Subdivision.	Total number of mandals.			Number of mandals whose		Remarks.
		In respect of which cadastral survey is settled.	In respect of which cadastral survey is not settled.	Total.	Papers examined and maps checked.	Maps checked.	
Kamrup ...	Gauhati ...	155	67	222	155	74	* Inspecting Babu Ramani Krishna examined the papers of 52 mandals and checked the maps of 52.
	Barpeta ...	31	31	62	22	...	
Darrang ...	Tezpur ...	...	60	60	...	...	
	Mangaldai ...	64	19	83	83	7	
Nowgong ...	Nowgong ...	93	68	161	91	59	
	Sadr	59	7	66	66	24	
Sibsagar ...	Jorhat	56	18	74	74	31	
	Golaghat ...	44	11	55	55	21	
Lakhimpur ...	Dibrugarh ..	...	66	66	14	11	† The Sub-Deputy Collector was employed mainly in office work.
	North Lakhimpur†	...	30	30	...	...	

The work in Nowgong, as noted already, was particularly unsatisfactory.

22. The statement below shows briefly the similar work done by the supervisor kanungos during the year:

Kanungos' inspections.

District.	Subdivision.	Number of kanungos.	Total number of mandals under the kanungos.	Number of mandals whose papers examined.	Number of mandals whose maps checked.
Kamrup ...	Gauhati ...	9	155	155	155
	Barpeta ...	2	31	29	29
Darrang ...	Tezpur ...	...	.....	.....	.....
	Mangaldai ...	3	64	53	53
Nowgong ...	Nowgong ...	4	93	93	85
Sibsagar ...	Sadr ...	3	59	44	41
	Jorhat ...	3	56	55	39
	Golaghat ...	2	44	44	43
	Total ...	26	502	473	445

The figures for mandals in the above statement differ from those of that which preceded it, as the kanungos deal only with the mandals of the area cadastrally surveyed.

II.—Analysis of Districts with reference to Security from Famine.

III.—System of Collection of Revenue and Rental in Precarious Tracts.

IV.—Measures of Protection.

23. As noted in previous years, there is happily no cause for dealing with the above subjects in a report coming from Assam.

No famine.

V.—Agricultural Experiments.

24. Experimental cuttings of crops continued to be made during the year, and were separately reported to the Chief Commissioner.

Crop experiments.

25. The small plantation of Malta oranges, citrons, and lemons near Thariaghat is reported to be doing well, but the time has not yet come for the trees to bear fruit.

Malta oranges, &c.

26. Having repeatedly failed in the endeavour to send live eri cocoons by parcel post to England, I took a few with me when proceeding on furlough, to see what could be done by personal supervision. To make sure of the cocoons being quite fresh, I obtained at Gauhati on the 14th of February 1891 eleven eri worms said to be ready to spin. I took down some castor oil leaves and fed them for two or three days in a tin box. By the 21st, when I went on board the steamer at Calcutta, most of them had spun. On the 25th at sea only one worm was visible, the others having made themselves white cocoons. Five of these were put into another tin box, drilled with holes and placed in the ice room, the remainder being left where they were in the cabin. On the 6th of March the last worm was found to have spun. On the 20th I landed at Naples and took the six cocoons with me across the continent, the five others going on in the steamer's ice room to London. I reached London on April 5th, the steamer having arrived a few days earlier. On the 13th instant both boxes reached the Assistant Director at Kew. Those in the box which had travelled in the ice room contained a few moths which had emerged in a crippled state and died in the box. Those in the box which I had kept with me were all dead, the cocoons being quite dry and shrivelled up. It is probable that in the ten or twelve days which elapsed between the arrival of the steamer in London and the delivery of the cocoons at Kew, the box which contained them was not kept near ice and that the moths then emerged. Had there been no delay between their arrival and delivery at Kew it is probable that some of the moths would have lived. It is difficult to suppose the moths would have emerged in a temperature not much above freezing point, and it is clear that the cocoons retained their vitality notwithstanding the cold. It would seem therefore that living eri cocoons can be landed in England if carried there in a sufficiently cold temperature.

Eri silk

27. In February 1891 the Government of Queensland applied through the Government of India for some varieties of rice grown on land not usually flooded. Eleven varieties of *ahu* were collected and forwarded at the close of last cold weather by the Deputy Commissioner of Kamrup.

Rice for Queensland.

28. In the cold season of 1890-91 a consignment of 6½ maunds of potatoes was sent to the Commandant of the Nága Hills Frontier Police. He reported that the result was a fair crop, but that the tubers were small, and in many cases infested with grubs. A further consignment of selected large potatoes was sent to him in time for planting at the close of the rains of 1891. These failed, as the year was exceptionally dry.

Potatoes.

VI.—Cattle.

29. Under the orders of the Government of India in letter No. 124C., dated the 28th January 1890, the subject of cattle is to be annually dealt with in this report. During the year a Note was published dealing generally with the cattle of Assam. The

Cattle disease.

statement below gives details as to the alleged mortality which occurred in the Province during 1891-92:

Name of district.	2		3		4		5		6		7		8		9		10	
	Rinderpest.		Foot-and-mouth disease.		Swelling of mouth and throat.		Diarrhœa, dysentery, and cholera.		An-thrax.		Catarrh.		Other diseases.		Total.		Estimated value of cattle.	
	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.
																	Rs.	Rs.
Goalpara ...	5,477	5,037	995	8,457	1,787	7,883	...	3,896	...	691	...	921	...	6,521	13,259	34,343	4,10,364	4,45,621
Kamrup ...	12,531	...	...	7,178	...	...	...	8,508	...	...	...	...	...	4,471	12,937	17,178	1,21,565	1,27,000
Darrang ...	...	...	...	2,793	...	1,752	12,731	8,643	...	...	...	...	...	3,012	27,834	13,200	1,18,469	1,49,116
Nowgong ...	...	...	...	...	...	...	8,161	9,931	...	...	...	...	3,869	1,117	13,973	13,161	92,911	97,868
Sibsagar ...	...	...	...	690	...	...	1,769	1,734	...	...	...	...	...	3,599	1,769	5,631	19,455	65,243
Lakhimpur ...	...	...	...	...	...	...	679	679	...	...	...	...	...	...	679	679	6,790	6,790
Cachar ...	...	191	...	...	...	...	...	...	...	...	...	...	...	500	191	500	1,337	3,500
Sylhet ...	8,811	1,613	...	1,190	...	3,337	1,417	2,473	...	9	2,804	304	7,047	7,457	20,035	16,333	1,40,886	1,14,251
Khasi and Jaintia Hills ...	...	...	...	73	...	...	...	...	...	...	...	...	...	...	...	73	.....	876
Naga Hills* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....	.....
Garo „ ...	...	...	...	91	...	3	...	4	...	...	...	...	...	...	91	98	.....	980
Total ...	34,833	7,550	1,186	20,502	1,787	13,074	25,169	29,464	...	700	2,804	1,232	10,916	29,624	77,037	102,040	5,40,236	6,83,361

* Unable to furnish statistics.

The above figures are necessarily only approximate. In Goalpara a serious outbreak of disease was reported from some outposts, and the deaths are said to have greatly exceeded those of the preceding year. In Kamrup disease was prevalent through the greater part of the year, but was worse in March, when scarcity of water was greatly felt in some parts of the district. In Sibsagar there was a slight outbreak of cholera and foot-and-mouth disease during the cold weather in the Golaghat sub-division. In Nowgong there was no epidemic, though disease prevailed more or less throughout the year.

In the hill districts the cattle are few, as they are not required for ploughing. There was some foot-and-mouth disease in the neighbourhood of Shillong and Cherra Punji at the close of the year, and also in the Naga Hills during the rains. There are no cattle in the Garo Hills, as the Garos drink no milk and do not plough, but some deaths are reported from the plains portion of the district.

In the Surma Valley the condition of the cattle was normal. Disease was more or less prevalent throughout the year, but was worst at the beginning and end of the rains, and more fatal in Sylhet than Cachar.

Bulls for breeding.

30. Of the three Kenwaria bulls imported for breeding puposes, one is dead, one has been sent to the North Cachar Hills, and one is at Sibsagar. The statement below gives details of the cost of keep of these animals:

District.	Wages of keeper.	Cost of food.	Miscellaneous.	Total.	Remarks.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Darrang ...	17 9 9	6 6 3	0 4 0	24 4 0	This bull was sent to the Sonthal colony in June 1891, and died of rinderpest in June 1892.
Sibsagar ...	80 0 0	65 0 6	2 0 0	147 0 6	This bull covered 16 cows, as against 38 last year.
Cachar ...	.....	99 0 3	.....	99 0 3	This bull covered 34 cows, as against 38 last year.
Total ...	97 9 9	170 7 0	2 4 0	270 4 9	

From information received respecting the four Kenwaria bulls owned by private individuals in the Mangaldai subdivision, it seems that their progeny now number 172. No record of coverings was kept, but the calves were counted.

VII.—Agricultural and Fiscal Statistics.

31. These are comprised in Return XLI B, which is separately submitted every year.

VIII.—Trade and Trade Statistics.

Trade reports.

32. The Annual Report on the River-borne Trade of the Province was issued on the 13th of November 1891. A Note on Foreign Trade for amalgamation with the Annual Provincial Administration Report was drawn up in due course. The Triennial Report on Foreign Trade will issue next year. Quarterly reports dealing with the river-borne trade of the Province were issued regularly.

IX.—Miscellaneous.

Fuel and fodder reserves.

33. There is nothing to note on the subject of fuel and fodder reserves in addition to what was reported last year.

Rainfall registrations.

34. The work of supervising the rainfall registration of the Province was transferred to my office in March 1890. The compilation of the weekly returns had formerly been done in the Secretariat, and for some months an attempt was made to continue the work with the ordinary staff of my office. This was found impossible, and in February 1891 my establishment was strengthened. Considerable changes occurred during the year under report, as indicated in detail in Appendix F.

The total number of registering stations has been increased by 17, of which 2 are under Government management and 15 under the control of tea planters. Gauges of approved uniform pattern have been supplied free of cost to all tea planters, who in return consented to furnish weekly returns. One copy of the local gazette is also sent to each non-official by whom the information is supplied. During the year under report, 82 new Symon's gauges, 103 measuring glasses, 12 spirit levels, and 5 measuring gauges have been supplied. The only difficulty at present experienced in getting the work properly done arises from the irregularity with which the weekly post cards are received. On the non-receipt of the usual card on the requisite date, a reminder is issued to the registrar concerned, and in a number of instances it is found from his reply that the figures originally sent have been lost in the post. No adequate remedy has at present been discovered for this state of things.

Since the close of the year, 61 additional measuring glasses have been indented for, so as to provide for every station having a spare glass. A specially constructed guage, with a receiver to hold 20 inches of rain without overflowing, has been supplied to Cherra Punji, where it not infrequently rains an inch an hour for many hours in succession. Another of similar capacity is also to be supplied to the Lalakhal tea estate in the north of Sylhet, where occasionally very heavy rainfall has to be registered.

Expenditure.

35. The statement below gives details as to the expenditure incurred by this department during the year, and compares the figures with those for 1890-91 :

Year.	Director's Head Office.	Settlement Office.	Survey School.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1890-91 ...	21,191 6 10	48,114 4 8	1,270 5 0	70,576 0 6
1891-92 ...	*15,093 9 5	†45,179 9 10	1,569 11 4	61,842 14 7

* This includes Rs. 858-7-11 on account of the Shillong Museum.
† This includes cost of Assam Valley Settlement Office, Rs. 25,697-7-5; of Pratabgarh Settlement Office Rs. 672-15-10; of Barpeta experimental survey Rs. 744-2-4; of advances recoverable Rs. 12,898-9-9; of zinc tubes Rs. 3,044-9-5; of racks Rs. 708; of mandals' furniture Rs. 98-4-0; of tracing glasses, Rs. 315-10.

The reduction was mainly owing to my absence on furlough, and the fact that there was no Director for three months of the year.

I have the honour to be,

Sir,

Your most obedient Servant,

H. Z. DARRAH,

Director, Department of Land Records and Agriculture, Assam.

APPENDIX A.

Diary Statement of Sub-Deputy Collectors of the Assam Valley Districts during the year 1891-92.

Name of Sub-Deputy Collector.	District.	Subdivision.	Number of days in charge.	Number of days on tour. In cadastral mauzas. Revising check lists.	Testing crops.	Examining mandalas' papers.	Enquiring into cases.	Miscellaneous work, inspecting theodolite survey, etc.	In non-cadastral mauzas. Testing measurements.	Examining mandalas' papers.	Enquiring into cases.	Miscellaneous work.	Total.	Number of days at office work.	Number of days without work. Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half pay.	Leave without pay.	Total.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jageswar Barkataki ..	Goalpara ..	Dhubri ..	253	..	..	..	..	..	..	..	..	15	15	204	..	25	9	..	..	..	34	
	Lakhimpur ..	Dibrugarh ..	113	..	..	..	..	40	2	5	18	65	130	10	17	..	5	12	..	..	34	
			366	..	..	..	..	..	40	2	5	33	80	230	10	36	9	12	..	..	..	68	
Raman Krishna Biswas	Kamrup ..	Gauhati ..	233	27	..	23	7	10	..	1	..	..	68	118	8	10	5	7	..	..	37	
	Darrang ..	Mangaldai ..	134	46	..	5	..	..	..	..	..	..	51	13	14	10	26	..	..	..	72	
			367	73	..	28	7	10	4	1	..	..	123	284	22	20	31	43	..	..	116	
Mossiat Ulah ..	Sibsagar ..	Sadr ..	129	..	..	6	1	..	..	..	..	..	7	216	7	4	6	..	..	..	17	
	Kamrup ..	Gauhati ..	143	59	..	13	..	7	4	..	..	..	95	30	4	6	..	..	..	..	10	
	Settlement Office.		100	..	..	..	..	..	..	..	..	..	..	100	..	..	..	..	..	..	..	
			366	59	..	31	8	7	3	1	..	..	102	246	7	4	6	..	..	..	17	
Phanidhar Chaliha ..	Darrang ..	Mangaldai ..	232	7	..	10	8	13	63	..	4	15	123	62	..	25	..	15	..	..	40	
	Sibsagar ..	Sadr ..	134	18	7	4	11	16	9	..	..	..	65	50	..	11	..	..	..	..	11	
			366	25	7	14	19	29	72	..	4	15	188	112	2	36	..	15	..	..	53	
Bholanath Das ..	Nowgong ..	Nowgong ..	366	40	4	24	31	35	5	..	3	6	157	173	4	22	3	1	..	..	30	
Lakshminath Kakati	Sibsagar ..	Jorhat ..	366	32	12	3	46	27	5	2	2	15	144	199	8	21	..	..	..	..	29	
Parbati Sanker Kar ..	" ..	Golaghat ..	366	17	..	13	24	91	16	..	..	1	162	167	7	24	6	..	..	..	37	
Krishna Ch. Chaudhuri	Darrang ..	Tezpur ..	142	..	..	..	..	..	36	22	7	28	93	49	5	9	..	..	..	..	14	
	Lakhimpur ..	North Lakhimpur.	169	..	..	..	..	..	..	..	1	2	3	124	..	12	..	80	..	..	92	
			366	..	..	..	..	..	36	22	8	30	96	164	5	21	..	80	..	..	106	

APPENDIX B.

Work Statement of Sub-Deputy Collectors of Assam Valley Districts during the year 1891-92.

Names of Sub-Deputy-Collectors.	District.	Sub-Division.	Cadastrally Surveyed Area. Number of mandals. Total number.	Whose papers examined.	Whose fields tested.	Testing by check lines. Number of lines.	Number of katans.	Number of offsets.	Length of lines in miles.	Number of cases in which resurvey ordered.	Area of fluctuating cultivation in Bighas, total of areas in eight periods, and annual.	Number of jungle trees per square mile of fluctuating cultivation.	Uncultivated Area. Number of mandals. Total number.	Whose papers examined.	Whose fields test tested.	Test-ing. Area remeasured in Bighas.	Area of fluctuating cultivation in Bighas, total of areas in eight periods, and annual.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Jageswar Barkataki	Goalpara ..	Dhubri ..	..	..	..	..	..	..	..	..	.....	..	..	..	..	..	.....	Revenue and Miscellaneous office work.
Ditto ..	Lakhimpur ..	Dibrugarh.	..	..	..	..	..	..	..	..	.....	..	50	24	12	3,632	28,833	
Raman Krishna Biswas ..	Kamrup ..	Gauhati ..	154	50	25	70	432	861	1670	5	58,044	754	67	2	..	..	68,184	
	Darrang ..	Mangaldai.	64	64	64	90	553	682	2232	..	15,770	283	..	..	..	..	.....	
Mossiat Ulah ..	Kamrup ..	Gauhati ..	135	130	70	206	2,020	3,736	6674	81	58,044	730	63	..	4	17,431	.....	
	Barpeta ..		31	22	..	..	..	..	..	..	17,160	..	14	..	..	..	.....	
	Sibsagar ..	Sadr ..	69	36	7	..	..	..	..	..	.....	..	3	..	..	..	.....	
Phanidhar Chaliha ..	Darrang ..	Mangaldai ..	64	64	9	68	80	274	..	..	15,770	31	19	10	..	..	16,624	
	Sibsagar ..	Sadr ..	50	50	20	273	356	1274	6792	..	3,324	586	7	7	..	..	.....	
Bholanath Das ..	Nowgong.	Nowgong.	93	46	45	81	724	1,278	3,170	19	40,559	147	68	51	4	491	7,793	
Lakshminath Kakati															5	69	69,823	
	Sibsagar ..	Jorhat ..	56	56	28	173	443	473	1786	17	6,587	498	18	18	3	506	16,933	
Parbati Sanker Kar	Ditto ..	Golaghat.	44	44	16	25	120	246	609	13	8,128	144	11	11	5	318	3,471	
Krishna Chandra Chaudhuri ..	Darrang ..	Tezpur ..	..	..	..	..	..	..	..	..	.....	..	50	50	5	2,580	.....	
Ditto ..	Lakhimpur	North Lakhimpur.	..	..	..	..	..	..	..	..	.....	..	30	..	..	..	.....	

APPENDIX C.

Diary Statement of Supervisor Kanungos of the Assam Valley Districts during the year 1891-92.

Name of Supervisor Kanungo.	District.	Sub-division.	Number of days in charge.	Number of days on tour.											Number of days at office work.	Number of days without work.						Remarks.
				In cadastral mauzas.					In noncadastral mauzas.													
				Running check lines.	Testing crops.	Examining mandals' papers.	Enquiring into cases.	Examining cash, inspecting thanahs, stations, &c.	Testing measurements.	Examining mandals' papers.	Enquiring into cases.	Miscellaneous work.	Total.			Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half pay.	Leave without pay.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Ganga Ram (Palasbari).	Kamrup	Gauhati	366	66	14	43	22	20	..	..	..	..	174	150	30	14	..	12	..	..	56	
Radhakishor (Nalbari)...	,,	,,	323	33	15	52	47	4	..	..	..	..	151	134	14	3	1	..	..	20	38	
Tita Ram (ditto) ..	,,	,,	43	1	..	5	9	..	..	..	..	..	15	21	5	3	1	..	..	..	7	
,, (East Circle) ..	Sibsagar	Sadr	323	..	16	36	3	31	..	..	..	..	86	195	11	24	7	..	..	..	42	
			366	1	16	41	12	31	..	..	..	..	101	216	16	35	8	..	..	..	49	
Laghuram (Hajo) ..	Kamrup	Gauhati	234	42	10	..	24	22	..	..	6	..	111	96	..	13	..	14	..	..	27	
,, (Roha) ..	,,	Barpeta	132	18	..	..	..	..	..	..	..	..	18	111	3	..	..	..	..	..	3	
			366	60	10	..	24	22	..	..	6	..	129	207	3	13	..	14	..	..	30	
Shibnath (Hajo) ...	,,	Gauhati	132	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Not available in time.
Kalamani (Boroma) ..	,,	,,	232	50	64	30	46	47	..	..	..	..	237	63	9	8	6	9	..	..	32	
Krishna Das (Boroma)	,,	,,	34	..	..	..	3	10	..	..	..	..	12	7	3	1	11	..	..	..	15	
,, (S.W. Circle) .	Sibsagar	Jorhat	332	15	11	2	21	33	..	..	..	..	88	179	35	3	27	..	..	..	65	
			366	15	11	2	25	43	..	..	..	..	100	186	38	4	38	..	..	..	80	
Konnath (Pandori) ..	Kamrup	Gauhati	366	100	..	30	50	5	..	..	..	..	185	116	31	6	8	30	..	..	65	
Lalit Ram (Borigog) ..	,,	,,	92	..	..	..	11	50	..	..	..	..	61	11	11	6	3	..	..	..	20	
Moni Ram (ditto) ..	,,	,,	138	32	..	10	36	18	..	..	..	..	96	42	..	..	..	..	..	..	..	
Dinanath (ditto) ..	,,	,,	138	13	..	..	44	31	..	..	..	..	88	21	12	3	14	..	..	..	29	
Dhir Singh (Tambulpur).	,,	,,	366	94	8	5	5	23	..	..	..	..	135	169	10	5	17	30	..	..	62	
Jina Ram (Pati Darrang).	,,	,,	366	59	45	39	24	27	..	..	3	..	187	100	12	9	43	15	..	..	79	
Gonarath (Beltola) ..	,,	,,	292	43	46	33	5	22	..	..	..	..	148	132	1	..	..	11	..	..	12	
Nityananda (ditto) ..	,,	,,	74	5	..	30	3	25	..	..	..	..	63	2	6	..	15	..	..	..	19	
Mina Ram (Bajali) ..	,,	Barpeta	366	100	25	26	24	23	..	..	..	..	200	111	15	5	5	30	..	..	55	
Bhogiram (Roha) ..	,,	,,	198	74	15	16	6	28	3	6	4	..	154	28	9	..	9	..	..	..	18	
Chandrakant Sarkar ..	Darrang	Mangaldai	366	30	15	32	73	32	..	..	..	..	191	106	14	24	6	25	..	..	69	
Doyaram Das ..	,,	,,	366	27	17	20	28	88	..	..	..	..	180	129	35	20	..	2	..	..	57	
Basir Ali ..	,,	,,	366	48	14	25	39	44	..	..	..	..	170	152	12	21	4	6	..	..	43	
Sisuram Chaudhuri ..	Nowgong	Nowgong	366	50	35	10	6	46	..	..	..	34	181	132	7	4	9	40	..	..	53	
Lakshmi Ram Das ..	,,	,,	366	62	40	25	40	18	..	..	..	16	201	94	3	8	14	46	..	..	71	
Jai Ram .. .. Ananda Ram Gogoi (Offg.) ..	,,	,,	96	..	..	..	5	..	..	..	..	..	5	44	..	17	..	30	..	..	47	
	,,	,,	270	23	11	12	28	24	..	..	..	7	105	118	13	34	..	..	..	..	47	
Rajnath Dutt ..	,,	,,	366	55	68	31	45	46	..	..	4	2	203	117	11	14	..	21	..	..	46	
Nanda Kumar Naha (E. Circle) ..	Sibsagar	Jorhat	366	26	6	19	56	22	..	..	..	..	130	190	27	23	..	..	..	..	50	
Durgaram Dutt (N.-W. Circle) ..	,,	,,	366	24	11	1	71	29	..	..	..	..	136	181	1	40	2	6	..	..	49	
Maheswar Das ..	,,	Golaghat	366	27	30	62	44	20	..	..	..	..	183	109	23	23	18	10	..	..	74	
Pua Ram Mohanta ..	,,	,,	366	21	30	96	82	16	..	..	..	..	245	40	25	21	13	13	..	..	72	
Lakshmi Kanta Das (W. Circle) ..	,,	Sadr	366	15	22	47	58	36	..	..	..	..	168	146	..	38	..	14	..	..	52	
Meheruddin Borah (Central Circle) ..	,,	,,	318	3	15	15	19	21	..	..	..	..	73	223	..	23	..	..	..	..	23	Joined 19th May 1891.

APPENDIX D.

Work Statement of Supervisor Kanungos of the Assam Valley Districts during the year 1891-92.

Name of Supervisor Kanungo.	District.	Subdivision.	Cadastrally Surveyed Area.											Remarks.
			Number of mandals.			Testing by check lines.						Area of fluctuating cultivation in square miles (including waste, jungle, pat, tari, and dariabeli).	Number of linear miles per square mile of fluctuating cultivation.	
			Total number.	Whose papers examined.	Whose fields tested.	Number of lines.	Number of stations.	Number of offsets.	Length of lines in miles.	Number of cases in which boundary differed.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Ganga Ram (Palasbari) ..	Kamrup ..	Gauhati ..	32	32	32	137	711	1,188	30	8	14,653	3·43		
Radha Kishor (Nalbari) ..	„ ..	„ ..	20	14	9	23	265	275	8	13	2,053	5·22		
Tita Ram „ ..	„ ..	„ ..		4	1	1	7	9	..	..	.....	.....		
„ (East Circle) ..	Sibsagar ..	Sadr ..	17	17	17	..	..	..	..	..	2,335	.....		
Laghnu Ram (Hajo) ..	Kamrup ..	Gauhati ..	22	22	22	128	2,006	2,463	62	65	13,243	6·05		
„ „ (Roha) ..	„ ..	Barpeta ..	11	..	..	..	..	..	..	..	8,848	3·63		In connection with the experimental survey?
Kalamoni (Boroma) ..	„ ..	Gauhati ..	17	17	15	88	613	898	23	10	11,461	5·70		
Krishna Das „ ..	„ ..	.....		6	9	64	74	392	5	3				
„ (South-west Circle)	Sibsagar ..	Jorhat ..	17	17	12	45	54	109	6	..	1,034	6·00		
Kounath (Panduri) ..	Kamrup ..	Gauhati ..	12	12	9	133	828	1,825	40	45	5,003	25·34		
Lalit Ram (Borigog) ..	„ ..	„ ..	..	..	..	..	..	..	..	..	.....	.....		
Manu Ram „ ..	„ ..	„ ..	14	14	14	67	501	1,038	29	43	4,865	9·88		
Dinanath „ ..	„ ..	„ ..		14	7	18	173	308	6	..				
Dhir Singh (Tambulpur) ..	„ ..	„ ..	14	14	13	188	839	1,117	41	17	4,743	16·59		
Jina Ram (Pati Darrang) ..	„ ..	„ ..	20	12	13	89	716	892	24	21	2,418	19·20		
Gonarath (Belto'a) ..	„ ..	„ ..	4	4	4	37	237	467	10	9	1,505	10·23		
Nitya Nanda „ ..	„ ..	„ ..		2	2	11	46	74	5	3				
Mina Ram (Bajali) ..	„ ..	Barpeta ..	20	20	20	178	1,852	2,786	73	16	9,108	15·40		
Bhogiram (Rohi) ..	„ ..	„ ..	11	10	10	87	510	722	17	..	8,848	2·63		
Chandra Kanta Sarkar ..	Darrang ..	Mangaldai ..	23	23	12	40	367	590	34	..	8,173	12·63		
Doya Ram Das „ ..	„ ..	„ ..	22	22	22	28	144	245	23	..	4,775	9·27		
Basir Ali ..	„ ..	„ ..	19	7	19	71	405	487	25	..	5,822	8·25		
Sisu Ram Chaudhuri ..	Nowgong ..	Nowgong ..	19	19	19	128	1,032	1,959	45	38	18,478	4·67		
Lakshmi Ram Das ..	„ ..	„ ..	30	20	29	109	801	1,095	25	54	9,416	7·73		
Jai Ram ..	„ ..	„ ..	25	..	..	..	..	..	..	..	.....	.....		On leave.
Anandaram Gogoi (Offg.) ..	„ ..	„ ..		25	18	32	281	335	14	5	7,725	3		
Ramrath Dutt ..	„ ..	„ ..	19	19	19	91	665	828	30	23	4,030	11·72		
Nanda Kumar Naha (East Circle).	Sibsagar ..	Jorhat ..	19	18	13	13	375	372	16	6	2,548	12·12		
Durga Ram Dutt (North-West Circle).	„ ..	„ ..	20	20	14	67	119	233	11	9	2,405	8·80		
Maheswar Das (Northern Circle).	„ ..	Golaghat ..	22	22	21	50	215	236	7	13	4,681	2·87		
Pua Ram Mohunta (Southern Circle).	„ ..	„ ..	22	22	22	56	137	213	7	1	3,447	3·91		
Lakshmi Kanta Das (West Circle).	„ ..	Sadr ..	27	12	9	22	172	131	5	107	344	23·41		
Meheruddin (Central Circle).	„ ..	„ ..	15	15	15	3	43	18	1	..	645	3·03		

APPENDIX E.

Statement showing Condition of Theodolite Station Marks on 30th June 1891.

District.	Classification.	Total number.	Total number found in good order by the mandals.	Total number found out in good order by the mandals.		Total of columns 4 & 5, or total in good order on 30th June 1891.	Total number not found by the mandals.	Remarks.
				Repaired.	Not repaired.			
1	2	3	4	5	6	7	8	9
Kamrup	(a) Prisms	6,210	5,904	102	62	6,006	142	
	(b) Jungle mounds	4,528	3,455	272	639	3,727	162	
	Gauhati (c) Semul boughs	1,132	833	42	206	875	51	
	(d) Kanungos' mounds	780	622	95	43	717	20	
	Total	12,630	10,814	511	950	11,325	375	
	(a) Prisms	543	520	3	2	523	18	
	(b) Jungle mounds	80	55	.....	2	55	23	
	Barpeta (c) Semul boughs	8	6	1	1	7	....	
	(d) Kanungos' mounds	174	137	14	3	151	20	
	Total	805	718	18	8	736	61	
	(a) Prisms	1,613	1,611	.....	.....	1,611	2*	* Washed away by river.
	(b) Jungle mounds	41	41	.....	.....	41	....	
Darrang	Mangaldai (c) Semul boughs	4,009	1,770	2,118	10†	4,888	112	† 5 replaced afterwards.
	(d) Kanungos' mounds	93	56	37	.....	93	....	‡ Washed away by river.
	Total	6,656	3,478	2,155	10	6,633	13	
	(a) Prisms	1,364	1,350	.....	1	1,350	13	
	(b) Jungle mounds	1,665	814	609	87	1,423	155	
Nowgong	Nowgong (c) Semul boughs	3,030	1,309	1,568	623	2,877	430	
	(d) Kanungos' mounds	116	28	57	31	85	....	
	Total	7,075	3,501	2,234	742	5,735	598	
	(a) Prisms	174	174	.....	.....	174	....	
	(b) Jungle mounds	37	37	.....	.....	37	....	
	Sadr (c) Semul boughs	1,141	683	449	302	1,133	56	
	(d) Kanungos' mounds	....	....	.....	.....	.....	....	
	Total	1,702	858	449	302	1,344	56	
	(a) Prisms	636	636	.....	.....	636	....	
	(b) Jungle mounds	....	....	.....	.....	.....	....	
Sibsagar	Jorhat (c) Semul boughs	4,126	1,131	1,101	1,338	2,232	630	
	(d) Kanungos' mounds	....	....	.....	.....	.....	....	
	Total	4,762	1,767	1,101	1,338	2,868	630	
	(a) Prisms	366	366	.....	.....	366	....	
	(b) Jungle mounds	65	65	.....	.....	65	....	
	Golaghat (c) Semul boughs	2,918	1,104	1,055	268	2,159	168	
	(d) Kanungos' mounds	10	10	.....	.....	10	....	
	Total	3,030	1,545	1,055	268	2,600	168	
	(a) Prisms	10,926	10,581	105	63	10,686	175	
Grand total for the province.	(b) Jungle mounds	6,416	4,467	881	728	5,348	340	
	(c) Semul boughs	18,171	6,837	7,334	2,748	14,171	1,352	
	(d) Kanungos' mounds	1,173	853	203	77	1,056	40	

APPENDIX F.

Statement of Rainfall Stations and Instruments.

District.	Number of stations on 31st March 1891.			Number abolished during 1891-92.	Number added during 1891-92.	Number of stations on 31st March 1892.			Number of instruments supplied.				Number of measuring glasses required for issue on 31st March 1892.	Remarks.
	Government.	Private.	Total.			Government.	Private.	Total.	Symon's gauges.	Measuring glasses.	Spirit levels.	5" measuring glasses.		
Sylhet	5	5	10	...	1	5	6	11	11	22	...	...	.....	The new station added is Dullabcherra.
Cachar	3	3	6	1	3	3	5	8	9	9	4	4	9	The station Nemotha was abolished on 14th March 1892, and three stations added, *viz.*, Bikrampur, Dewan, Monierkhal.
Garo Hills ...	1	...	1	...	...	1	...	1	1	1	1	1	1	
Khasi and Jaintia Hills	3	...	3	...	...	3	...	3	4	3	3	...	3	One Symen's gauge to hold 20 inches of rain has been recently supplied for Cherra Punji to replace the existing one, which could only contain, without overflowing, about 4 inches.
Naga Hills ...	3	1	4	...	1	4	1	5	5	5	...	...	5	The new station is Dimapur.
Goalpara	3	2	5	...	...	3	2	5	4	...	...	...	.....	The Dhubri station has an observatory, and is under the direct management of the Meteorological Reporter, Calcutta.
Kamrup	9	2	11	1	5	10	5	15	8	8	...	...	16	One station was abolished on account of the amalgamation of Luki and Chamaria. The five stations added are Barduar, Hajo, Ramgaon, Rani, and Kulsi. The last station is under the management of the Forest Department. Seven stations already had 5" Symon's gauges and 1 measuring glass each.
Darrang	3	5	8	1	4	3	8	11	12	15	4	...	9	The station Kotahi was abolished after it had been provided with a gauge and a glass. There are one gauge and two glasses in this district in excess of the requisite number. The four stations added are Chengumari, Borelli, Balipara, and Chardiar, the last one under the Forest Department.
Nowgong	1	6	7	...	...	1	6	7	7	7	...	...	7	
Sibsagar	3	5	8	...	3	3	8	11	9	9	...	...	11	Sibsagar sadr station has an observatory, which is under the direct management of the Meteorological Reporter. The station Golaghat already had a gauge reported to be of Symon's pattern. The new stations added are Nazira, Atabari, and Sunari.
Lakhimpur ...	4	5	9	...	3	4	8	12	12	24	...	...	.....	The new stations added are Moran, Wilton, and Balijan.
Total	38	34	72	3	20	40	49	89	82	103	12	5	61	

A. S. P. O. (Agriculture) No. 9—222—14-9-92.

Remarks on the Report of the Department of Land Records and Agriculture, Assam, for 1891-92.

It is requested that any reply, or future reference, to this communication may quote its number, distinguishing letter, and date.

No. 4488R.

FROM

THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM,

TO

THE DIRECTOR OF THE DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM.

Shillong, the 9th September 1892.

SIR,

I AM directed to communicate the following remarks of the Chief Commissioner upon your Report on the Operations of the Department of Land Records and Agriculture, Assam, during the year 1891-92.

2. *Paragraph 4.*—The Chief Commissioner observes that you took over charge on the 18th of October 1891 on your return from furlough, and that out of the 165 days which elapsed after your return to the close of the year, you spent 130 days on tour, during which period you were able to spend some six weeks in the Surma Valley, and dispose of many important matters in connection with the settlement of Pratabgarh and the cadastral survey of the Jaintia parganas, the three remaining months of the year being spent in the Assam Valley, during which period you visited the districts of Kamrup, Darrang, Nowgong, and Sibsagar. The Chief Commissioner is well satisfied with the amount of touring work done. During the coming cold weather the Chief Commissioner hopes that the district of Lakhimpur will come under your inspection.

3. *Paragraphs 5 and 6.*—The statements given in these paragraphs, which show the touring done by the Sub-Deputy Collectors and supervisor kanungos, supply the omissions pointed out in paragraph 13 of Mr. Gait's letter No. 4054R., dated the 4th November 1891, reviewing the Report for 1890-91. The time spent on tour by the Sub-Deputy Collectors was up to the required standard, but only 4 of the 33 supervisor kanungos succeeded in accomplishing the required period of 200 days. The Chief Commissioner approves your proposal to appoint supervisor kanungos to circles at a distance from their homes, and the same rule should be observed in regard to Sub-Deputy Collectors also.

The Chief Commissioner notices that Appendices A to D are new, and are intended to show the work done by Sub-Deputy Collectors and supervisor kanungos. He understands that you were, on the whole, satisfied with the work of the Sub-Deputy Collectors, so far as you were able to inspect it. The papers of all the supervisor kanungos were inspected by you. It is not very clear from paragraph 6 of the report whether you consider that these men, on the whole, have worked well or not. In this connection I am to invite your attention to paragraph 5 of letter No. 4054R., dated the 4th November 1891, quoted above. In this letter, among other things, you were requested to report on a suggestion made by the Chief Commissioner that the subjects which were discussed in paragraphs 5 to 12 of last year's report, and which, with the exception of the subject of test measurement done by the Sub-Deputy Collectors and

supervisor kanungos, are again discussed in paragraphs 6 to 8, 12 and 14 of the present report, might be omitted, and left to be dealt with in the Commissioner's Land Revenue Report. This suggestion has raised the larger question, which has since been brought forward by you, as to the relations which should subsist between you and the Commissioner, and as to what your powers and responsibilities, as well as those of the Commissioner, are in such matters as the supervision of settlement operations, the distribution of circles of mandals and supervisor kanungos, the grading and promotion of these officers, the maintenance of settlement records, the supervision of the touring, testing, and other work done by the Sub-Deputy Collectors, supervisor kanungos, tahsildars, mauzadars, and mandals, and other similar matters. The Chief Commissioner hopes to be able shortly to issue definite orders on this subject after ascertaining what the practice is in Bengal, Burma, and the Central Provinces.

4. *Paragraph 13.*—The Barpeta survey, which was undertaken as an experiment with a view to give effect to a scheme which provides for the gradual survey by each mandal of his circle piece by piece each year, and the basing of his annual settlement for the surveyed portion on the areas obtained from his map, was commenced in the cold weather of 1889-90 and completed during the survey season of the following year. The total area surveyed amounted to 111·64 square miles, of which 19·46 square miles, or 17·43 per cent., were settled, and the rest was unsettled waste. The total cost, including revision, to the final completion of all the papers, was Rs. 5,626-6-0, or Rs. 50-6-5 per square mile. The net increase in the revenue resulting from the whole survey amounts to Rs. 1,378, which represents a return of 24·48 per cent. on the expenditure incurred. The maps prepared are said to be good and likely to be fit for use for many years to come. The results shown are, in the opinion of the Chief Commissioner, very satisfactory.

5. *Paragraph 18.*—The Chief Commissioner is glad to see that you were able to inspect the village papers of all but one mauza in the cadastrally-surveyed areas of Kamrup, Darrang, Nowgong, and Sibsagar. The account given in this paragraph of the condition of the papers of each district shows how necessary these annual inspections are. The special attention of the Commissioner, Assam Valley Districts, will be drawn to this account. As pointed out in paragraph 5 of the letter reviewing last year's report, the Commissioner is primarily responsible for seeing that the district and subdivisional officers exercise proper supervision over the work done by the Sub-Deputy Collectors, kanungos, tahsildars, mauzadars, and mandals, and that the rules issued for their guidance in 1889 (since revised) are strictly enforced. It is not satisfactory to find that in many instances these rules have been totally disregarded. If the Sub-Deputy Collectors are made clearly to understand that their promotion in future depends upon the quality of their work, they will probably be stimulated to give more attention to the rules issued for their guidance than they appear to have done hitherto.

I have the honour to be,

SIR,

Your most obedient Servant,

F. C. DAUKES,

Secretary to the Chief Commissioner of Assam.

MEMO. NO. 4489R.

Shillong, the 9th September 1892.

COPY, with a copy of the Report, forwarded to the Commissioner of the Assam Valley Districts, for information and guidance, special attention being invited to the remarks made in paragraph 5 of the letter to the Director of Land Records and Agriculture.

By order of the Chief Commissioner of Assam,

F. C. DAUKES,

Secretary to the Chief Commissioner of Assam.

A. S. P. O. (Revenue) No 9—320—12-9-92.

ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

FOR

1892-93.

By H. Z. DARRAH, I.C.S.,

DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE.

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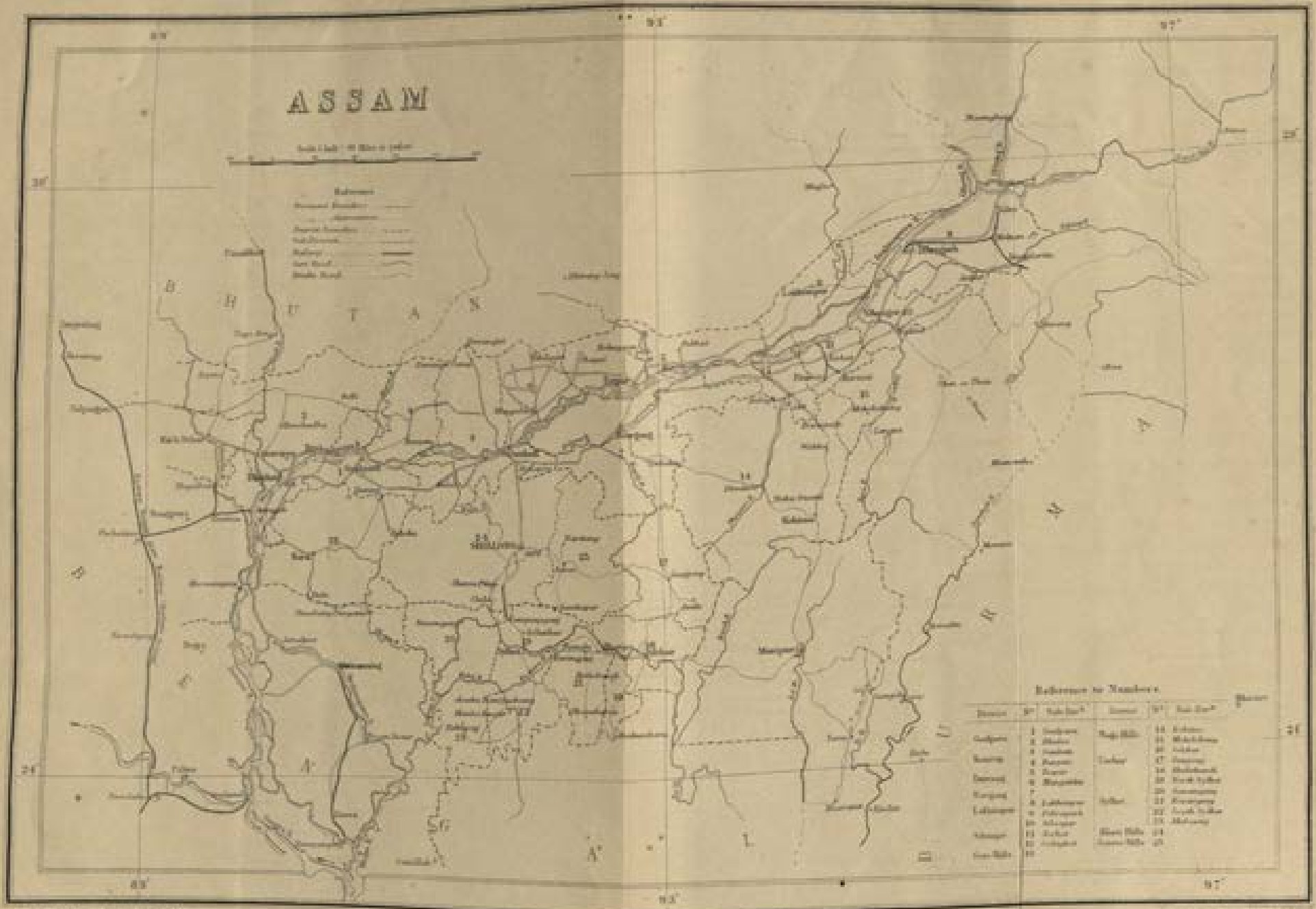
ASSAM
B H U T A N
Reference to Numbers.

Annual Report of the Department of Land Records and Agriculture, Assam, for 1892-93.

It is requested that any reply, or future reference, to this communication may quote its number, distinguishing letter, and date.

No. 4209.

FROM

THE DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

To

THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Dated Shillong, the 19th August 1893.

SIR,

Tenth Report.

I HAVE the honour to forward herewith the Tenth Annual Report, giving an account of the operations of the Department under my control for the year ending the 31st March 1893. I was in charge for the whole of the year.

Report writing.

2. The following reports were issued during the summer months :

(1) The Annual Departmental Report.
(2) The Annual River-borne Trade Report.
(3) The Provincial Land Revenue Report.

In addition to these, the Annual Settlement Report for the twelve months ending 30th September 1892 was written as usual during the camping season. The Takbast survey of Sylhet in 1859-65 had been a subject of discussion during the cold weather of 1891-92, and, under Mr. Ward's instructions, I wrote in July a Note based on original documents obtained from the office of the Calcutta Board of Revenue, giving a history of that survey in connection with its legal effect at the present day on the rights of the holders of permanently-settled lands. The Note, though not long, took up much time, as documents going back for more than 50 years had to be examined. As the cadastral survey of the Jaintia parganas, carried out last cold weather, was then approaching, Rules had to be issued for regulating the work of the settlement office. These were based on those which had prevailed in the Assam Valley districts, but the different conditions of Sylhet necessitated many changes. The Rules for the maintenance of Settlement Records in cadastrally-surveyed tracts were revised and largely recast on the basis of the experience gained during the preceding three years. The Survey School Rules, which had been much altered by subsequent orders since they originally came out in 1884, were also recast and brought up to date during the year. Finally, the operations connected with extensions of cadastral survey by local agency on the lines worked out in the Barpeta experiment, were reduced to a system, and Rules issued indicating the manner in which this work was in future to be done.

Reassessment of the Assam Valley.

3. In May 1892 proposals embodying a scheme for the reassessment of the Assam Valley districts, the ordinary settlements of which were to fall in on the 31st March 1893, were laid before the Chief Commissioner and on the receipt of his orders in June 1892 the first practical steps were taken towards the carrying out of the work. During the

remainder of the summer, my time was largely taken up by supervising these arrangements and fixing the provisional classification of the bulk of the villages in the four districts of Kámrúp, Darrang, Nowgong, and Sibságar. The Provisional Lists all issued before the close of October.

Director's tours.

4. When the year opened, I was touring in the *chaprí* mauzas of Kámrúp and did not return to headquarters till the 21st April. On the 20th July I started for my usual rains tour, and, after spending a few days inspecting at Gauháti, stayed the 27th at Sibságar and reached Dibrugarh on the 28th. There details as to the new Survey School were arranged with the Deputy Commissioner, and on the 30th I arrived at Silghat and next day examined a statement giving certain figures required for reassessment purposes in connection with Nowgong. The first of August was spent at Tezpur and the 2nd and 3rd at Gauháti. On the 4th I returned to Shillong. On the 15th of November I started on a second tour in the Assam Valley with a view to discuss with the local officers the arrangements to be made for the coming reassessment. I visited Gauháti, Mangaldai, Silghát, and Jorhát, and had interviews with the four Deputy Commissioners and four Subdivisional Officers of the districts, the villages of which were this year to be classified. After arranging all details with them I returned to Shillong on the 26th November.

On the 30th I left headquarters for a tour in Sylhet, and arrived at that station on the 4th December. On the 7th I met Mr. O'Brien (Deputy Commissioner) and Mr. French (Subdivisional Officer) at Karimganj, and on the 8th reached Patharkandi, where I stayed for some days examining the Partabgarh settlement work. On the 10th and 11th I met, by previous appointment, almost all the tea-planters whose gardens came within the cadastrally-surveyed area, and with them and the Deputy Commissioner and Subdivisional Officer, who had come on from Karimganj immediately after me, went over the maps and papers connected with the various grants. The majority of the maps were passed on this occasion and the Register containing details of the boundaries fixed by the Survey, signed by the grantees in token of acquiescence. On the 15th we rode into Karimganj and reached Sylhet on the 17th. Here I halted some time arranging matters connected with the Jaintia settlement with the Settlement Officer, Chandra Kanta Sen, and going over the Pratabgarh grant maps with Mr. Barrett, Superintendent of Survey. On the 2nd January I was again in Shillong, and, after a halt of three days, started for the Brahmaputra Valley. The 9th found me in Gauhati, from which place I went along the South Trunk road to Nowgong, where I arrived on the 20th. On the 24th I crossed over to Tezpur from the new ghat at Dhing and after meeting the Chief Commissioner there, went on by the North Trunk road to the Mangaldai subdivision. From Shekhar I crossed the Bornadi into the Kamrup district and reached Tumbalpur on the 4th February. Here I held an examination of tahsildars for certificates in practical surveying, and then continued my march to the Barpeta subdivision, where I examined the mandals' papers and the work being done in extending the Barpeta experimental survey. On the 1st March I met the Deputy Commissioner, Mr. Teunon, at the headquarters of the subdivision, and on the 3rd left Khalabandha by steamer, landing on the 5th at Komlabari, the river ghat for North Lakhimpur. On the 7th I was at North Lakhimpur, where I saw the Subdivisional Officer, Mr. Brown, and on the 10th reached Dibrugarh. Here I found the Chief Commissioner and discussed with him, amongst other things, the reassessment of the town, which I went over with the Settlement Officer, Rai Sarat Chandra Banerji Bahadur. On the 14th I reached Sibságar, where the questions connected with the reassessment of the town and of the subdivision were gone over at a conference with Mr. Monahan. On the 17th I arrived at Jorhát, where I went round the town with Mr. Gurdon and discussed the classification of the villages in that subdivision. The 21st found me at Golaghát, where the reassessment operations then going on in the town and subdivision were inspected. On the 25th I reached Nowgong, and there went over the district reassessment list village by village with Mr. Kennedy, the Deputy Commissioner. On the 28th I marched to Doboka and thence *vid* Dyangmukh and Jowai to Shillong, where I arrived on the 13th of April. Consequently, I was on tour for 165 days (= 5½ months) during the year.

Slight change in form of report.

5. In last year's report the touring of Sub-Deputy Collectors and supervisor kanungos and the work done by them were dealt with before the sections treating of the organisation and maintenance of village records were taken up. But, as the officers named are almost entirely employed in keeping up village papers, the paragraphs commenting on their work have been relegated to the first of the special heads for this report prescribed by the Government of India.

Grading of mandals.

6. The revised scheme for raising the pay of mandals in the first and second grades to Rs. 12 and Rs. 9 from Rs. 10 and Rs. 8 was introduced into Lakhimpur from the 1st August last. The following

table shows for each district the grading as it stood on the 1st April 1893, and compares these figures with those of the previous year and with the sanctioned scale :

Name of district.	Sanctioned according to the revised scale.				Grade on the 1st April 1892.				Grade on the 1st April 1893.				Increase or decrease during the year.			
	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.
Goalpára ..	5	12*	18	35	...	3	23	26	...	9	25	34†	...	+ 6	+ 5	+ 9
Kámrúp ...	59	88	148	295	25	84	170	279	17	96	182	295‡	— 8	+12	+12	+16
Darrang ...	30	45	75	150	18	41	81	140	13	40	81	143	— 7	+ 8	—	.
Nowgong ...	34	51	85	170	29	6	126	161	19	23	119	161	—10	+17	— 7	...
Sibságar ...	39	58	97	194§	14	23	158	195	19	28	147	195	+ 5	+ 5	—11	...
Lakhimpur ...	24	36	60	120	6	8	82	96	6	15	77	98	...	+ 7	— 5	+ 2
Total ...	191	290	483	964	92	165	643	900	74	221	632	927	—18	+56	—11	+27

* Six on the 9-rupee grade and six on the 8-rupee grade.
† Sanctioned during the year eight mandals for Bijni Estate, one mandal for Amarat Rāj.
‡ Exclusive of the five mandals of Bolbali, paid by the Bijni Estate. The sanctioned scale on 31st March 1893 was—

First grade	..	..	60
Second ,,	..	..	84
Third ,,	..	..	140
			284

§ But 15 more men were sanctioned in Secretary to the Chief Commissioner's No. 5164R., dated the 30th October 1892.
¶ Changed to 200 by Secretary to the Chief Commissioner's No. 76 Survey, 1893R., dated the 3rd July 1893.

As compared with the figures of the preceding year, the number of second-grade men has increased in every district, while the total of first grade men has fallen off in the three districts of Kámrúp, Darrang, and Nowgong. The increase in the second grade is due to promotions having been given to third-grade mandals, mainly for good work as amins with the survey party. The decrease in the first grade is due to some men of that grade having been appointed supervisor kanungos or tahsil muharrirs, &c., while the paucity of men in the lower grades qualified for promotion has prevented the gaps being filled up. A high standard of excellence as a surveyor is demanded from men claiming promotion to the first grade.

Survey schools.

7. A new survey school was opened on the 1st August 1892 at Dibrugarh. Thus, with the one at Gauháti, two schools were in existence at the close of the year. The object of the Dibrugarh school was the instruction of the mandals of Lakhimpur in surveying before the papers of the area cadastrally-surveyed in 1891-92 were handed over to their custody. The establishment sanctioned for the school is noted below :

One survey master	...	...	...	on Rs. 30	per mensem.
,, chaukidár and chainman			...	,, 8	,,
Rent	...	...	...	,, 6	,,
Contingencies	.	...	..	,, 10	,,
Rewards	..	...	...	,, 15	,,

The statement below gives details as to the number of pupils passed by each school during the year and the average cost per pupil.

Year.	Number of men who received first-class certificates.					Number of men who received second-class certificates.				Total pupils.	Total cost of the schools.	Total receipts.	Net cost.	Average net cost of each passed pupil.
	Tahsildars.	Mauzadars.	Mandals.	Chaukidars.	Total.	Mauzadars.	Mandals.	Candidates.	Total					
											Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1891-92 Gauhati ..	2	1	10	12	25	1	14	81	96	121	1,769 11 4	1,370 0 0	399 11 4	3 12 5
1892-93 { Gauhati ..	..	..	1	11	12*	1	19	64	84	101	1,178 1 3	1,241 8 6	—166 7 3	—1 10 43
{ Dibrugarh ..	..	..	..	..	..	..	8	2	10†	10	312 8 8	106 0 0¶	206 8 8	20 10 8
Total 1892-93 ..	..	..	1	11	12	1	27	71	99	111	1,187 9 3	1,447 8 6	40 1 3	0 5 10

* Besides the eleven candidates not taken at the examination passed.
† Besides four candidates passed.
‡ Besides the three candidates not taken in the second passed.
§ Gain per pupil passed.

		Gauhati.	Dibrugarh.	Total.
		Rs. a. p.	Rs. a. p.	Rs. a. p.
Pay of teachers	..	960 0 0	178 8 0	938 8 0
,, servants	..	96 0 0	48 0 0	132 0 0
Rewards to teachers	..	64 0 0	.....	274 0 0
Contingencies	..	93 0 9	86 0 6	183 1 3
		1,178 0 9	312 8 6	1,487 9 3
¶ Schooling fees	..	1,166 0 0	94 0 0	1,349 0 0
Examination fees	..	172 0 0	22 .	194 0 0
Sale-proceeds of mandals' rules	.	13 8 0	.....	43 8 0
		1,341 8 0	106 0 0	1,447 8 0

There were three term examinations held at the Dibrugarh school, in which 46 mandals, 28 school candidates, and 11 candidates not taught at the school appeared, but only 8 mandals, 2 school candidates, and 3 candidates, not taught at the school, passed. The large failure is ascribed by the Deputy Commissioner to the inefficiency of the mandals in arithmetic.

The Gauhati school did good work as usual. It was more than self-supporting, there having been a profit to Government of Rs. 166-7-3 at the close of the year. The rewards paid to the teachers amounted to Rs. 274, as against Rs. 188 in the preceding year. The Dibrugarh school has not been long enough working to produce much effect as yet, and, as a consequence of high initial expenses, a small attendance of pupils and inexperience on the part of the teacher, the cost per passed pupil was high. This is sure, however, to fall. Taking the two schools together, the cost per passed pupil fell from Re. 1-3-3 to Re. 0-5-10, the net expenditure for the year being only Rs. 40-1-3.

The Rules regulating the management of these schools were revised during the year, all orders subsequent to 1883 being amalgamated with them. The Rules of 1892 relating to the proper maintenance of settlement records in cadastrally-surveyed tracts have been added to the subjects required for the term examination.

Examination for first-class certificates.

8. The examinations for first-class survey school certificates were held by Mr. O'Donel in December 1892 and May 1893. Out of a total number of 53 examinees, of whom only one was a tahsildar, only 13 succeeded in passing. The tahsildar failed.

Qualified subordinate officials.

9. The statement below gives details as to the number of qualified tahsildars, mauzadars, and mandals in Government employ at the close of the year under report as compared with the figures of the preceding year. Details as to candidates for employment are also given :

District.	Total number on 31st March 1893.			Number exempted on 31st March 1893.			Men who have passed the first-class certificate examination on 31st March.						Men with second-class certificates on 31st March.					
	Tahsildars.	Mauzadars.	Mandals.	Tahsildars.	Mauzadars.	Mandals.	Tahsildars.		Mauzadars.		Mandals.		Tahsildars.		Mauzadars.		Mandals.	
							1892.	1893.	1892.	1893.	1892.	1893.	1892.	1893.	1892.	1893.	1892.	1893.
Goalpára ..	1	8	358	7	..	..	..	..	..	..	..	..	..	..	2	2	15	16
Kámrup ..	12	3	2005	1	..	18	7	5	8	5	35	81	12	21	..	1	3	1
Darrang ..	4	17	143	..	2	10	2	1	3	1	11	11	1	1	..	1	6	6
Nowgong ..	3	20	195	1	..	..	1	3	4	4	22	24	2	2	..	..	4	2
Sibságar ..	3	24	195	1	2	..	..	2	2	2	37	32	..	1	..	1	24	22
Lakhimpur ..	..	38	38	..	..	..	..	1	1	..	6	8	..	1	..	..	1	1
Total	23	125	939	2	16	25	7	9	18	11	121	105	16	26	..	3	41	33

District.	Men with second-class certificates on 31st March.				Men with third-class certificates on 31st March.			
	Mandals.		Candidates.		Mandals.		Candidates.	
	1892.	1893.	1892.	1893.	1892.	1893.	1892.	1893.
Goalpára ..	15	16	..	..	226	241	..	..
Kámrup ..	226	241	169	169	110	111	26	26
Darrang ..	110	111	26	26	119	81	49	49
Nowgong ..	4	2	85	119	81	85	4	6
Sibságar ..	24	22	81	85	4	6	..	..
Lakhimpur ..	1	1	8	14	..	5	..	..
Total	3	41	33	537	600	322	278	

* Nine additional mandals—one for mauza Itipu at the right for the new Bijni tahsil—were named during 1892-93.
† Includes five mandals of Beltola maintained by the mauzadars of 15 additional mandals sanctioned during the year under report.

Mauzadárs are being gradually replaced by tahsildárs in most districts of the Assam Valley, and as a natural consequence the number of certificated mauzadárs is decreasing.

Special survey examination for tahsildárs.

10. On the 5th February and subsequent dates I held an examination in surveying at Tamlupur for tahsildárs with a view to giving the certificate required by Rule 7 of the Rules for the Admission of Candidates for Appointments in the Provincial and Subordinate Services in Assam (*vide* Notification No. 10610G., dated the 18th November 1892). Three tahsildárs appeared and one passed. Besides these men, I also examined on the 18th February Babu Keshab Chandra Singh, tahsildár of Roha, who had been unable to attend at Tamlupur. I found him a good practical surveyor, and accordingly gave him the necessary certificate.

Prescribed headings.

11. In the paragraphs below, the headings prescribed by the Government of India in Circular No. 54A., dated the 28th April 1884, have been separately taken up.

I.—Organization and Maintenance of Village Records.

Superintendent of Land Records.

12. The appointment of Superintendent of Land Records was created during the year upon the representation of the Local Government that an officer of the Survey Department was required in order to ensure the maps and records prepared by the Survey Party being kept properly up to date upon professional lines. The services of

Mr. J. H. O'Donel, who had worked in the Assam Party since 1883, were asked for by the Chief Commissioner, and he was seconded in his own department and took over charge of the newly-created post on 20th November 1892. His headquarters were fixed at Tezpur, and from that station he started on his first inspecting tour on December 1st. He went through the surveyed area of the Sibságar district before the close of that month, and then proceeded to Gauháti, where he held the examination for first-class survey school certificates on the 20th and succeeding days. He then crossed over to Mangaldai, and from that station started on a tour which occupied him till the close of the financial year and took him through the most important parts of the Kámrúp and Nowgong districts. When the year closed, he was inspecting the Sibságar mandals for the second time. Out of the 132 days during which he held his appointment, he was on tour for 121 days. His diaries were sent to me weekly and his inspection notes forwarded duly to the Deputy Commissioners concerned. Being new to the kind of inspection required, as much was not accomplished in the time at his disposal as would under other circumstances have been done, but the care taken in, and labour expended upon, his inspections resulted in a thoroughness which left little to be desired. The statement below gives some details as to what was done during the season, and is a record of very painstaking and reliable work :

Name of district.	Total number of superior schools.	Number of superior schools whose papers were examined.	Number of superior schools visited.	Total number of mandals in the district.	Number of mandals whose papers were examined.	Number of mandals visited.	Number of candidates whose papers were examined.	Number of candidates.	Number of candidates who passed.	Number of candidates who failed.	Number of candidates who absented themselves.	Number of candidates who could not be found living.	Remarks.
Mangaldai ..	..	..	9	....	..	..	53	5	89	126	209	....	....	Number of mandals not noted, but all those examined were visited.
Kámrúp ..	1	1*	..	..	15	15	1	254	..	1	4	4	34	
Nowgong ..	8	....	..	14	12†	16	1	206	44	127‡	..	111	82	
Sibságar ..	8	7	....	9	11§	..	..	..	..	....	....	....	....	Did not inspect.
Do. to ..	....	..	..	..	1	1	..	9	10	80	..	7	..	Did not inspect.
Total ..	33	31	....	9	96	42	110	1,008	1,155	39·02	1	829	421	

13. The statement below shows briefly the touring done by Sub-Deputy Collectors. Further details as to the manner in which their time was spent will be obtained from Appendix A.

Touring of Sub-Deputy Collectors.

District.	Sub-division.	Name of sub-Deputy Collector.	Number of days in harness.	Number of the month in which touring was carried on.			Remarks.
				In camp.	In head-quarters station.	Total.	
Goálpára. ...	Dhubri ...	Ratnadhar Barua ...	180	...	89*	89	* Includes 40 days spent in the survey camp at Jaintia in learning surveying.
Kámrúp ...	Barpeta ...	Parbati Sankar Kar ...	172	89	25	114	
,, ...	Gauháti ...	Massiat Ullah ...	112	25	1	26	
,, ...	,, ...	Chandra Kanta Sen ...	51	...	...	...	
,, ...	,, ...	Bholanath Das ..	180	114	...	114	
Darrang ...	Mangaldai ...	Jogeswar Barkataki ...	299	108	9	117	
,, ...	Tezpur ...	Krishna Chandra Chaudhuri...	365	...	153	153	
Nowgong ...	Nowgong ...	Bholanath Das ...	185	62	...	62	
,, ...	,, ...	Lakshminath Kakati ...	161	125	2	127	
Sibságar ...	Golaghát ...	Parbati Sankar Kar ...	193	8	...	8	
,, ...	,, ...	Didar Uddin Ahmed ...	172	91	17	108	
,, ...	Jorhát ...	Lakshminath Kakati ...	204	40	27	67	
,, ...	,, ...	Jagat Bandhu Das ...	60	10	...	10	
,, ...	,, ...	Radha Kanta Handiqi ...	101	6	78	84	
,, ...	Sadr ...	Phanidhar Chaliha ...	365	139	35	174	
Lakhimpur.	North Lakhimpur.	Rajani Kanta Bardaloi ...	173	11	96†	107	† Includes 48 days spent in the survey camp at Jaintia.
,, ...	Dibrugarh ...	Jogeswar Barkataki ...	66	35	...	35	
,, ...	,,	Massiat Ullah ..	253	50	9	59	

Babu Ratnadhar Barua is one of the new Sub-Deputy Collectors appointed on probation in October last. For 40 days he was at work in the survey camp at Jaintia, learning surveying. By the close of March he had returned to Dhubri, and was engaged in surveying the Latka mauza.

Babu Parbati Sankar Kar was attached to the Golághát subdivision till October, when he was transferred to Barpeta. From the 3rd May to the 16th July (74 days) he was on leave and during the rains did very little touring at Golághát. In Barpeta out of 172 days he was 114 days on tour inspected the work of most of the mandals, and supervised the extension of cadastral survey in 41·00 square miles in mauzas Ruposi and Chapaguri. He ran 33·18 linear miles of check lines, but the fluctuating area of the Barpeta subdivision is so great (18,685 acres) that even this mileage brings out only the small proportion of 1·14 miles per square mile of fluctuating cultivation. He accompanied me on my inspections in Barpeta. He is at present quite new to his work, and requires a good deal of supervision.

Munshi Massiat Ullah was attached to the sadr subdivision of Kámrúp till July 21st, but owing to ill-health did very little touring. At Dibrugarh also he was very little in camp, only 59 out of 253 days, but this was not his fault, as for the greater part of that period he was employed by the Settlement Officer, Rai Sharat Chandra Banerji Bahadur, with the Deputy Commissioner's permission, on revision work connected with the recent survey in the two subdivisions of Lakhimpur, as well as on enquiries connected with the coming town settlement. This latter work especially kept him at headquarters for weeks together. He started the new Survey School at Dibrugarh, and, till a survey master was appointed, spent a part of his time in instructing the mandals. Though in the statement above the Sub-Deputy Collector does not come out well, the Settlement Officer reports that his work was thoroughly satisfactory, and, from what I saw at Dibrugarh, I am disposed to endorse that opinion.

Babu Chandra Kanta Sen was officiating as Extra Assistant Commissioner during most of the earlier part of the year. He reverted for a few weeks in August and September, when he was attached to the sadr subdivision of Kámrúp, and engaged in special work in connection with the newly-surveyed mauzas. On the 1st October he was appointed Settlement Officer of the Jaintia parganas.

Babu Bholanath Das was at Nowgong during the earlier half of the year and at Gauháti after the 10th October. He was altogether 176 days on tour and arranged for carrying out extensions of cadastral survey in the Patidarrang, and Tambulpur tahsils, where an area of 25·92 square miles was surveyed during the cold weather of 1892-93. He was also engaged (with the Deputy Commissioner's permission) in making local enquiries in connection with revision cases sent him by the Settlement Officer. The then Deputy Commissioner of Kámrúp, Mr. Teunon, reported that he worked on the whole fairly well. I saw a good deal of the Sub-Deputy Collector during my tour in Kámrúp, and was glad to notice an improvement in energy and diligence since his transfer from Nowgong.

Babu Jageswar Barkataki was nominally attached to the Dibrugarh subdivision for the first two months, but for 35 days was learning surveying in the cadastral camp. Out of 299 days at Mangaldai he spent 117 days on tour and ran only 4·43 miles of check lines, or 0·55 mile per square mile of fluctuating cultivation. I inspected his work when marching through the Mangaldai subdivision and found it thoroughly unsatisfactory. He was obviously unfit for his post, and has since been ordered to revert to his substantive appointment in the Assam Secretariat.

Babu Krishna Chandra Chaudhuri was attached to the sadr subdivision of the Darrang district throughout the year, and spent 153 days on tour. He was deputed to Lakhimpur in connection with the cadastral survey for 50 days, and held charge of the Tezpur tahsil during the absence on leave of Babu Rabi Chandra Sarma. The surveyed portion of the Tezpur subdivision will come under his charge during the current year, when it will be possible to form a better idea of the Sub-Deputy Collector's qualifications. During the year under report he was chiefly engaged on miscellaneous revenue duties, such as making local enquiries into cases.

Babu Lakshminath Kakati was at Jorhát till 21st October, and was also in charge of the Sub-Deputy Collector's work in the Golághát subdivision from 6th May to 10th July during the absence of Parbati Sankar Kar. He was then transferred to Nowgong and remained there to the close of the year. He was 192 days on tour, a longer time than spent in camp by any other Sub-Deputy Collector. In the Dhing, the Town, and the Silghat circles of Nowgong 33·14 square miles have been added, under his supervision, to the cadastral area by extension of survey on the Barpeta experimental system. He inspected 467 theodolite stations and supervised the erection of 35 mounds. In the

unsurveyed area also he worked hard. His testing in mauza Salmara in the Majuli, and its remeasurement, made by 12 mandals under his supervision and under the superintendence of the Subdivisional Officer, Lieutenant Gordon, all led over Rs. 2,500 to the revenue of that mauza at the last regular settlement. This is a satisfactory record of work, and the Sub-Deputy Collector deserves much credit for his industry and zeal.

Babu Phanidhar Chaliha was attached to the Sadr subdivision of Sibságar throughout the year and was 154 days on tour. He ran 20·89 linear miles of check lines, which brings out the proportion of 2·87 linear miles per square mile of fluctuating cultivation. Under his supervision an area of 34·6 square miles in mauzas Konwarpur, Gachuli Bazar, and Abhaipur was surveyed on the Barpeta system during the last cold weather.

Munshi Didar Uddin Ahmad is another of the new Sub-Deputy Collectors. He took over charge of the Golághát subdivision from Babu Parbati Sankar Kar on the 11th October, and was in camp for 108 days, of which 30 days were devoted to testing mandals' measurements, 20 days in surveyed and 10 days in unsurveyed areas. He arranged for and supervised extensions of the cadastral survey over an area of 24·22 square miles, and brought to light by his careful and intelligent inspections much double dealing on the part of the ryots and mandals of Golághát in the matter of fraudulent resignations of land. He is a Sub-Deputy Collector of much promise.

Babu Jagathandhu Das was appointed on the 22nd July, and was posted to the Jorhát subdivision, but, before actually doing any work, he fell ill and was obliged to go on leave, and Babu Radha Kanta Handique, the newest of the Sub-Deputy Collectors, was appointed in his place. Babu Radha Kanta Handique was chiefly engaged in supervising extensions of cadastral survey over an area of 15·81 square miles in mauzas Chawkhat and Hazari, a work which he has carried out with much intelligence and energy.

Babu Rajani Kanta Bardalai is another of the group of Sub-Deputy Collectors appointed last October. He was posted to North Lakhimpur, and, as no portion of the subdivision has yet been settled on the results of the cadastral survey, had nothing to do in connection with the examination of cadastral papers. For 48 days he was at the survey camp at Jaintia, engaged in learning practical surveying. It is too soon to form any judgment as to his qualifications.

Touring of supervisor kanungos.

14. The number of days spent on tour by each supervisor kánungo is given in the statement below. Further details as to the manner in which they spent their time are given in Appendix B.

District.	Subdivision.	Name of circle.	Name of supervisor kanungo.	Number of days in charge.	Number of days on tour.	Remarks.
Kámrúp ...	Barpeta ...	Barpeta ...	Basir Ali ...	331	128	The circle was formed only in May.
,, ...	,, ...	Bajali ...	Mitaram Das ...	365	196	
,, ...	,, ...	Roha ...	Phúgiram ...	365	228	
,, ...	Gauhati ...	Beltola ...	Nityananda ...	202	36	Suffered from ill-health.
,, ...	,, ...	,, ...	Manirum Talukdar, officiating.	163	102	
,, ...	,, ...	Tamulpur ...	Phir Singh Deka ...	365	220	
,, ...	,, ...	Goreswa ...	Kalamati Das ...	365	28	
,, ...	,, ...	Palasbari ...	Ganga Ram ...	365	241	
,, ...	,, ...	Rajo ...	Leghman Ram ...	365	269	
,, ...	,, ...	Nalbari ...	Padhakisor ...	136	44	Since dismissed.
,, ...	,, ...	,, ...	Lalit Ram, officiating ...	138	48	
,, ...	,, ...	,, ...	Lakhini Kanta Deka ...	164	57	Since dismissed.
,, ...	,, ...	Pardubi ...	Kumath ...	275	21	
,, ...	,, ...	Boriagog ...	Mani Ram, officiating ...	1	109	
,, ...	,, ...	,, ...	Khoda Baksh ...	9	0	
,, ...	,, ...	,, ...	Jagannath, officiating ...	153	1	
,, ...	,, ...	Paikhurang ...	Jimarun ...	64	...	No information furnished, because the kanungo was on sick leave at the close of the year, and has since died.
,, ...	,, ...	,, ...	Jagannath, officiating ...	147	1 3	
,, ...	,, ...	,, ...	Mohan Chandra ...	154	12	
,, ...	,, ...	Poko ...	Jina Ram ...	257	7	No supervisor kanungo in this circle during 1905.
,, ...	,, ...	,, ...	Kali Ram ...	44	8	
,, ...	,, ...	Barkhetri ...	Jiu Ram ...	313	141	The circle was formed till May.
Darrang ...	Mangaldai ...	Circle No. I.	Chandra Kanto Sarkar ...	365	175	
,, ...	,, ...	,, II.	Dayaram Das, officiating ...	85	29	
			Mohan Chandra Das ...	40	13	Died during the year.
			Jaigoram Sahari ...	240	85	

District.	Sub-District.	Name of circle.	Name of supervisor.	Rate.	Number of days in charge.	Number of days on tour.	Remarks.
			Fasu Ali	...	34	19	Was in charge from 1st April to 4th May 1892.
Darrang ...	Mangaldai...	Circle No. III.	Bhikatram Hajarika	...	161	86	Was in charge from 7th May to 14th October 1892.
			Nepal Chandra Das, Offg.	...	59	37	Was in charge from 7th November 1892 to 4th January 1893.
			Rammal Do	...	86	50	Was in charge from 5th January to 31st March 1892. No supervisor kanungo from 5th May 1892 to 6th May 1892 and from 15th October 1892 to 6th November 1892.
Nowgong ...	Nowgong...	No. I.—Silghát	Ramnath Dutt	...	365	212	
,, ...	,, ...	,, II.—Town	Rabi Charan Das	...	317	160	
,, ...	,, ...	,, ...	Lakshmi Ram Das	...	48	37	From 1st April to 19th May.
,, ...	,, ...	,, III.—Dhing	Jai Ram Das	...	115	91	
,, ...	,, ...	,, ...	Gadadhar Das, officiating	...	47	30	
,, ...	,, ...	,, ...	Tita Ram Gogoi	...	156	16	No supervisor kanungo in Dubaka for 47 days.
,, ...	,, ...	,, IV.—Roha	Ananda Ram Gogoi	...	37	11	From 1st April to 7th May.
,, ...	,, ...	,, ...	Sibnath Sarma	...	278	146	From 8th May to 16th October and again from 6th December to 31st March.
,, ...	,, ...	,, ...	Jai Ram Das	...	27	6	From 9th November to 5th December.
,, ...	,, ...	,, ...	Janma Chandra Borah, officiating	...	23	10	From 17th October to 8th November.
,, ...	,, ...	,, V.—Dhing	Gonarath Deka	...	207	149*	Joined 19th May.
,, ...	,, ...	,, VI.—Jagrna	Govinda Ram Dutt	...	317	157	Ditto.
,, ...	,, ...	,, VII.—Gh na-ghua.	Lakshmi Ram Das	...	317	159	
,, ...	,, ...	,, VIII.Myang	Shahabuddin	...	40	11	
,, ...	,, ...	,, ...	Gonarath Deka	...	123	60	
,, ...	,, ...	,, ...	Dinanath Sarma, officiating	...	66	...	
,, ...	,, ...	,, ...	Janma Chandra Borah, officiating.	...	83	41	
,, ...	,, ...	,, ...	Rammal Das, officiating	...	18	13	
Sibságar ...	Golaghát ...	Northern Circle.	Moheswar Das	...	365	195	On leave for 30 days, and hence could not do the necessary amount of touring.
,, ...	,, ...	Southern ,,	Pun Ram Mohanta	...	365	203	
,, ...	Jorhát ...	Eastern ,,	Nanda Kumar Saha	...	365	230	75 days in experimental surveying in mauza Chaldiát.
,, ...	,, ...	North-Western Circle.	Durga Ram Dutt		365	216	64 days in experimental surveying in mauza Hazari.
,, ...	,, ...	South-Western Circle.	Krishna Das	...	46	19	Dismissed.
,, ...	,, ...	,, ...	Daupati Das	...	319	116	
,, ...	Sadr ...	Eastern Circle.	Tita Ram Gogoi	...	39	14	Transferred to Nowgong and then given leave.
,, ...	,, ...	,, ...	Sib Ram Pathak	...	326	182	35 days in extension survey.
,, ...	,, ...	Central ,,	Munshi Mazar Uddin Borbh...	...	365	211	72 days in extension survey.
,, ...	,, ...	Western ,,	Lakshmi Kanta Das	...	359	204	45 days in extension survey.
,, ...	,, ...	,, ...	Shashidhar Kakati, officiating.		6	6	6 days in extension survey.

* Sim Ram was the senior Kanungo of this circle but the Superintendent of Survey, however, has been deputed to work in connection with the Assam-Bengal Railway, and Lakshmi Ram was promoted to the charge in his place.

I personally inspected the work in every one of the above circles except Hajo Boko, and Barkhetri in Kámrúp, Silghat in Nowgong, and the Sibságar Circles. All these were inspected by Mr. O'Donel, the newly-appointed Superintendent of Land Records, those in Sibságar being examined twice, once at the beginning and once at the close of the cold season. Amongst the 15 men in charge of a circle for the whole year, as well as one man in charge for a few days less, all spent more than 200 days in camp, except Basir Ali, Chandia Kant, Mina Ram, Lakshmi Ram, and Moheswar. Basir Ali was transferred to one of the new circles in the Barpeta subdivision early in the year, and I was engaged in organising the work and teaching the mandals how to deal with the cadastral papers. It was necessary that he should have been so employed, and the full number of days in camp could not be expected of him. Chandra Kant was 25 days below the minimum, which was unsatisfactory, but his papers when inspected were found in good order. The remaining thirteen completed over 194 days, and, therefore, almost reached the prescribed minimum. The work of Mina Ram, Bholanath, Dhir Singh, Konnath, and Jugganath in Kámrúp, of Rabi Charan, Gonarath, Gobind Ram, and Lakshmi Ram in Nowgong, I found had been satisfactory, and Mr. O'Donel speaks

favourably of the state of things in the circles of Laghnoo Ram in Kámrúp, Pua Ram in Golaghát, and Meher Uddin and Lakshmi Kanta in Sibságar. Radha Kisor was dismissed for absenting himself from his circle and visiting without permission his home in Mangaldai, and Krishna Das for declining to obey an order of transfer to Kámrúp. The work of Lakshmi Kanta was found very unsatisfactory, and he has since reverted to his substantive appointment of mandal in the Sibságar district. Khuda Baksh, the former Government surveyor of Tezpur, who was given a kanungoship on the abolition of his former appointment, has been specially reported to the Chief Commissioner for dismissal, on account of gross mistakes discovered in his work while in his Tezpur post. Jina Ram became seriously ill towards the close of the year, and, being on sick leave, no reliable information was obtainable as to his tours. He has since died. In Mangaldai many changes took place during the year owing to the death of Mohan Chandra, the resignation of Bhakat Ram, and the sickness of Nepal Chandra. In Nowgong the formation of four new circles, the sickness of Jai Ram, and the deputation of Sibnath Sarma to railway surveying involved many changes. In Sibságar the changes were few.

Director's and Superintendent's inspections.

15. The area cadastrally surveyed by the professional party during 1890-91 and revised in 1891-92 was settled during the year under report on the results of that survey. The total amounted to 781·00 square miles. If to this be added the 21·46 square miles surveyed by the Barpeta mandals in 1891-92 under extension of survey rules, we have an area of 802·46 square miles to add to the total of 3,790·12 square miles (since corrected to 3,791·00) mentioned in last year's report. This area is distributed amongst the different districts in the manner noted below :

Kámrúp	...	...	...	...	...	1,672·97
Darrang	...	...	...	...	...	547·02
Nowgong	...	...	...	...	...	1,002·99
Sibságar	...	...	...	...	...	1,370·48
Total	...	...	...	...	...	4,593·46

The village papers of 71 per cent. of the mandals of the above tract were examined by Mr. O'Donel, who saw the work of all but two of the supervisor kanungos. But for his inexperience in the kind of work required, Mr. O'Donel would have inspected the work of every mandal. I examined the village papers of 317 mandals, of whom 72 had not been before Mr. O'Donel, and inspected the work of 21 kanungos, including the two who had not been seen by the Superintendent of Land Records. Altogether, therefore, none of the kanungos and only 43 mandals, or 7·09 per cent. altogether, escaped inspection. Next year the number will be fewer. The names of those who were absent were in each case reported to Deputy Commissioners, who enquired into the cause. In the case of each mandal, every map and abstract book and the bulk of the *dág chithas* and *jamabandis* were examined. Inspection notes by Mr. O'Donel, as well as by me, dealing in considerable detail with these papers, were in each case forwarded to the Deputy Commissioners concerned. In the remarks below I have given a brief account of the results of our inspections, as far as the condition of the village papers of each subdivision and district is concerned.

Kámrúp.—In this district there are in the cadastrally-surveyed area 14 supervisor kanungos and 240 mandals. Of these Mr. O'Donel saw 12 kanungos and 187 mandals, and I inspected the papers of 11 kanungos and 147 mandals, of whom 2 kanungos and 27 mandals had not been before Mr. O'Donel. Therefore only 13 mandals escaped inspection. The most important duty in the hands of the subordinate settlement staff last cold weather was the correction of the *nisfkhoraj dág chithas* and *jamabandis*, so as to bring them up to date for the new decennial settlement to be made this year. These papers are, under the rules, bound to be brought up to date each year, but, inasmuch as the revenue is not affected by the alterations that occur during the currency of a settlement, the temptation to neglect to record annual changes is great, and in many circles the work had as a matter of fact fallen into arrears. Special attention was, therefore, paid to this point during the cold weather, and in some circles (*e.g.*, Mina Ram's at Bojali, Jagganath's at Borigog) all the papers had been brought up to date when I inspected them in February.

As usual, the erection of mounds in jungle tracts had been shirked as much as possible, except in the circles of Dhir Singh of Tambulpur and Mina Ram of Bojali. Both these kanungos and their mandals had done very well in this matter, Dhir Singh in particular having rediscovered and marked with mounds and *semal* boughs a number of the original theodolite stations fixed by the survey party eight years before. In the erection of mounds in tracts of fluctuating cultivation there was an improvement as compared with the record of the previous year. The custom of copying on to a new map, without verification on the ground, fields surveyed by the mandals since the

cadastral survey, was found still prevalent in some localities. This is a survival of the old pernicious system which prevailed before the advent of the cadastral survey by which the *dág chithas* and *jamabandis* were annually copied without any attempt to record corrections necessitated by the transactions of the ryots, or the lapse of time. The Deputy Commissioner's special attention was drawn to the fact that when a mandal has been twelve months in a circle, there is no excuse for any error whatever in his maps, and should such be discovered, he should be invariably punished. Unless this rule is systematically acted on, it will be impossible to secure the exact agreement of the map with the ground, which is the condition upon which the accuracy of the whole revenue system of the Province depends. The papers of the area cadastrally surveyed in 1890-91, comprising parts of the Palasbari, Boko, Hazo, Barkhetri, and Barpeta circles, were of course not in a satisfactory state, as the kanungos were new to the locality and the mandals to the work they were called upon to do. A large amount of the area, which should have been settled at the regular settlement, was not measured till the cold weather, because the faired papers from the Settlement Office did not arrive in time. Consequently, the *dariabadi* area of many mauzas was abnormally extensive, and the papers were filed late. In the old circles, however, the *dariabadi* papers were fairly well up to date, and the general condition of the records, except as to the matters pointed out above, creditable to the officers concerned.

Darrang.—The Tezpur cadastral records having only reached the mandals after the close of the year under report, the papers of Mangaldai alone were examined. In the cadastrally-surveyed area of this subdivision there are 3 supervisor kanungos and 64 mandals. Mr. O'Donel saw all the kanungos and 23 of the mandals, and I inspected in addition 58 more mandals. Therefore, only 3 mandals' papers escaped examination. The village records were found in fair order on the whole. Of course, there were exceptions, and these were pointed out to the Subdivisional Officer. The inspection of theodolite station marks showed considerable improvement as compared with last year, but those situated in jungle had again been much neglected. The *dariabadi* papers were well up to date, and out of 45 theodolite stations inspected in the course of my tour, I found no less than 41, or over 91 per cent., with living *semal* boughs.

Nowgong.—There are 8 supervisor kanungos and 144 mandals in the cadastrally-surveyed area of this district. Mr. O'Donel inspected the work of all the kanungos and of 121 of the mandals. I saw 7 of the kanungos and 108 of the mandals. Only 6 mandals escaped inspection altogether. As compared with last year, the papers were in better order, but much remains to be done before the effects of the slackness of the former Sub-Deputy Collector will be removed. Babu Lakshmi Nath Kakati, the present Sub-Deputy Collector, has consequently a good deal of work still before him. There was some delay in filing the *dariabadi* papers, not only in those mauzas which came in 1892 under settlement on cadastral survey results, and where it was, therefore, unavoidable, but also in those which had been settled for many years. In many cases it was found that the custom mentioned above, as still surviving in Kámrúp, of copying on to a new map, without verification on the ground, the areas plotted by the mandals since the cadastral survey, had not disappeared. Severe punishment was very rightly inflicted in one case. If this always follows detection of error in the map, the practice must inevitably be stamped out. There was an improvement in the marking of theodolite stations. Out of 299 which I counted, I found 243, or over 81 per cent., provided with living *semal* trees. Mr. O'Donel counted 82 living trees out of 111, or almost 74 per cent. The abstract books were mostly in order, as well as the *dág chithas* and *jamabandis*.

Sibságar.—There are 8 supervisor kanungos and 159 mandals in the cadastrally-surveyed part of this district. Mr. O'Donel made two tours in the district and inspected the work of all the kanungos on each occasion. Of the mandals he saw 115 in December and 101 in March. Of these latter 79 had been seen before, so only 22 altogether escaped inspection. The Sibságar district was surveyed later than any of the three to the west, and its cadastral records have consequently not been as long in the hands of the mandals as those of Kámrúp, Mangaldai, and the greater part of Nowgong. Notwithstanding this, Mr. O'Donel reports that they are, except as to the maps, in a fairly satisfactory condition. The maps disclosed, in many instances, serious errors, for which there is the less excuse in that there is very little fluctuating cultivation for the mandals to deal with. Mr. O'Donel ran 9·83 miles of *perial* on his second visit, and found that the errors were mainly due to the practice of copying previous surveys on to a new map without verification on the ground. A very large number of theodolite stations were found to have been left unvisited, and the sites of very many are reported lost. These, in almost all cases, were situated in jungle, and their disappearance is due to disregard of the clearest instructions. Out of 427 stations counted, Mr. O'Donel found living *semal* trees at 285. This is only 66·7 per cent., the smallest average found in any district.

Unsurveyed tracts.

16. The greater part of the settled areas of the Tezpur, North Lakhimpur, and Dibrugarh subdivisions, as well as the bulk of the Majuli in Sibságar, had been surveyed in 1891-92, and the revision of the survey took place during the year under report. Consequently, none of the cadastral papers had, before the close of the year, been placed in the hands of the mandals, and there was nothing in the way of village records (except the old mauzadári papers, which it was obviously useless to examine) to inspect at the subdivisions named. The unsurveyed area is now being annually reduced by the system of extending survey described in paragraph 26. During the year under report 188·13 square miles were surveyed, and if this rate is continued there will in a very short time be no settled land in Assam for which sixteen-inch-to-the-mile maps will not be in existence.

Inspections by Deputy Commissioners and Subdivisional Officers.

17. In the statement below brief details are given as to the testing work done by Deputy Commissioners and Subdivisional Officers, full particulars being given in Appendix C:

Name of officer.	Subdivision.	Kanungos.		Mandals.				
				In cadastral area.			In non-cadastral area.	
		Total number.	Whose work inspected.	Total number.	Whose papers examined.	Whose maps checked.	Total number.	Whose work inspected.
G. Gordon, Esq. ...	Dhubri	...	...	...	...	...	35	...*
Babu Harish Chandra Chaki ...	Barpeta	3	2	49	1	2	20	10
W. Tennon, Esq. ...	Gauháti	11	...	191	...	..	40	...
H. E. Ransom, Esq. ...	Mangaldai	3	...	64	...	2	19	...
Babu Akhaya Kumar Chatterji ...	Ditto	3	1	64	...	1	19	3
J. D. Anderson, Esq. ...	Tezpur	...	...	...	...	...	69	...
Lieutenant C. G. M. Kennedy ...	Nowgong	8	2	144	4	12	17	4
L. J. Kershaw, Esq. ...	Goálpárá	2	...	44	...	...	11	...
Lieutenant P. R. T. Gurdon ...	Jorhát	3	1	56	...	1	18	...
F. J. Monahan, Esq. ..	Sibságar Sadr ...	3	2	59	12	4	7	4
R. S. Greenshield, Esq. ...	Dibrugarh ...	...	...	...	..	...	68	...
B. V. Nichol, Esq. ...	North Lakhimpur ...	...	...	...	...	...	30	1
W. B. Brown, Esq. ...	Ditto	...	...	...	...	...	30	1
Total ...		33	8	607	17	22	325	23

* No return received.

The inspection done was meagre, but the Deputy Commissioners and Subdivisional Officers were, except in Goálpára, Tezpur, and Lakhimpur, mainly occupied in reassessment work.

Sub-Deputy Collectors' inspections.

18. The statement below shows briefly the work done by Sub-Deputy Collectors in the matter of inspecting village records during the year under review:

District.	Subdivision.	Total number of mandals.			Number of mandals whose		Remarks.
		In mauzas cadastrally surveyed.	In mauzas not cadastrally surveyed.	Total.	Papers examined and checked in cadastral and non-cadastral mauzas.	Maps checked.	
1	2	3	4	5	6	7	8
Kámrúp ...	Barpeta ...	49	20	69	43	45	
	Gauháti ...	191	40	231	118*	48*	* In addition to these, Moushi Massiat Ullah examined the papers of 58 mandals and checked maps of 2.
Darrang ...	Mangaldai ...	64	19	83	26	7	
	Tezpur ...	...	60	60	60	...	
Nowgong...	Nowgong ...	144	17	161	144	35	In addition to these, Babu Bhola Nath examined the papers of 39 and the field-work of 6 mandals in the cadastrally-surveyed area.
Sibságar ...	Goálghát ...	44	11	55	32	14	In addition to these, Babu Lakshminath examined the papers of 7 and field-work of 15 mandals.
	Jorhát ...	56	18	74	6	3	
	Sibságar Sadr ...	59	7	66	62	55	
Lakhimpur	North Lakhimpur	...	30	30	...	...	The Sub-Deputy Collector did not test any measurements.
	Dibrugarh ...	...	68	68	...	...	Ditto.
	Total ...	607	290	897	491	267	

Details of the work done are given in Appendix D. The heaviest outturn is that of Lakshminath Kakoti of Nowgong, who (excluding his work in Jorhát) ran 268 check lines aggregating 60·05 linear miles, and examined the field-work of 66 per cent. and the papers of all the mandals in his charge. Parbati Sankar, Bhola Nath, and Phanidhar Chaliha come next, with lengths of 33·18, 31·58, and 20·89 linear miles. Jogeswar Barkataki, with 4·43 linear miles, did badly. The other Sub-Deputy Collectors were new. The largest area of the unsurveyed tract measured up after the mauzadári fashion was done by Krishna Chandra Chaudhuri (609 acres) and Rajani Kanta (454 acres). They had no cadastral mandals to deal with. The most concealed cultivation (33 acres) was discovered by Didar Uddin. Lakshminath in Jorhát found 74 acres of *basti* wrongly classed as *faringati*.

Supervisor kanungos' inspections.

19. The similar work done by supervisor kanungos during the year is given in the statement which forms Appendix E. As each supervisor kanungo is bound to test the papers of every mandal in his circle, a brief statement like that given in paragraph 18 is not required. The greatest length of check lines was run by Bhogirath of Roha in Kámrúp, who did 87·69 linear miles, though Dhir Singh of Tambalpur in the same district was not far behind, with 82·68. Mina Ram of Bojali did 73·52, Kalamani of Boroma 55·55, and Laghnoo Ram of Hazo 41·17 linear miles, all in the same district. Outside Kámrúp the greatest lengths done were by Gunarath of Dhing (54·74), Lakshmiram of Ghugua (40·88), and Gobindram of Gerua (35·84), all of Nowgong; Moheswar of the Northern Circle (53·48), and Pua Ram of the Southern Circle (42·72), both of Golághát. The largest area of fluctuating cultivation is reported from Gobindram's circle (Gerua) in Nowgong, where his *pertal* lines only gave an outturn of 2·43 linear miles per square mile of fluctuating cultivation. Other circles with heavy fluctuating cultivation show better results, *e.g.*, Mina Ram's, whose *pertal* lines work out to 8·32 linear miles per square mile; Bhogirath's, where 5·73 linear miles was done; and Laghnoo Ram's, where the kanungo accomplished 5·47 linear miles. In circles where the fluctuations are not extensive the *pertal* lines show sometimes needlessly high results, as, for instance, in Pua Ram's circle, whose mileage gives 27·38 linear miles per square mile. It would seem as if this kanungo had done some useless work by running lines over permanent cultivation.

Tahsildárs' inspections.

20. The inspections of mandals' papers done by tahsildárs is shown in the statement which forms Appendix F, and that carried out by mauzadárs, tahsil muharrirs, &c., in Appendix G. The longest mileage of check lines was done amongst tahsildárs by Udoi Chandra of Hajo (40·93), Cheni Ram of Boroma coming next with 24·81 linear miles, and then Radha Nath of Rangia with 22·34. Robi Chandra of Tezpur tested the largest area of unsurveyed land by the laborious mauzadari method (2,061 acres), and Gobind Ram of Palashbari did almost as much (2,002 acres) and discovered the largest area of concealed cultivation (134 acres). It is significant that none of the tahsildárs detected any incorrect classification, though probably no error is more common in the land around *basti* sites.

The mauzadárs of Nowgong did the most testing with check lines (55·85 linear miles), and those of Barpeta the most remeasurement of unsurveyed tracts (5,256 acres).

Testing in cadastrally-surveyed tracts.

21. The net result of the testings carried out during the last two years by all classes of officers is given in the following statement for the cadastrally-surveyed tracts:

Testing during 1891-92 *and* 1892-93 *in areas cadastrally surveyed.*

District.	Subdivision.	Total area cadastrally surveyed up to the close of		Linear miles of check lines by												Total area of fluctuating cultivation in acres.		Number of linear miles per square mile of fluctuating cultivation.		Remarks.
				Deputy Commissioners and Subdivisional Officers.		Subordinate Collectors.		Supervisor kanungos.		Tahsildars.		Mauzadars.		Total.						
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Goálpára	Dhubri	.....	.....	...	...	...	...	...	.....	...	...	...	...	.....	.....	...	...	...	...	Not cadastral surveyed.
	Goálpára	.....	.....	...	...	...	...	...	.....	...	...	...	...	.....	.....	...	...	...	...	
Kámrúp	Barpeta	372·22	399·21	1·51	0·91	5·06	33·18	68·94	202·86	24·19	33·54	3·94	21·28	103·44	296·77	5,983	18,685	11·06	10·16	* Includes the area (111·54 sq. miles) experimentally surveyed in Barpeta, as well as that (21·46 square miles) subsequently surveyed in Roha on the Barpeta system. † By Babu Kalirám Chaudhuri, Extra Assistant Commissioner.
	Gauháti	1,300·68	1,350·68	† 0·94	...	79·39	30·12	296·50	378·56	113·50	144·68	1·00	...	491·33	553·36	19,648	40,004	16·00	8·85	
Darrang	Mangaldai	549·47	644·00	2·90	1·37	25·77	4·43	83·50	64·50	8·87	20·13	52·20	33·13	173·24	123·62	5,257	5,189	21·10	14·01	
	Tezpur	.....	213·10	...	...	...	...	...	.....	...	...	...	...	.....	... ..	.	...	...	...	
Nowgong	Nowgong	1,600·54	‡1,002·99	...	9·49	31·19	64·37	125·07	236·86	...	10·13	42 18	55·85	198·44	375·70	13,517	44,041	9·39	5·46	‡ Includes the two villages of mauzas Dalgaon and Sepajhar transferred from Darrang.
Sibságár	Golághát	299·52	299·52	...	..	6·09	6·98	14·70	96·20	...	...	8·41	5·33	29·20	108·46	2,709	2,889	6·99	24·04	
	Jorhát	483·98	634·14	1·94	0·42	17·80	2·38	34·06	24·46	...	0·86	8·57	2·99	62·31	31·11	2,296	3,129	17·36	6·36	
	Sadr	587·03	587·03	...	1·06	9·98	20·89	6·85	19·57	...	0·45	...	0·81	16·78	42·78	1,108	4,464	9·70	6·13	
Lakhimpur	N. Lakhimpur	.....	80·06	...	...	...	...	...	.....	...	...	...	...	.....	... ...	...	...	...	...	
	Dibrugarh	.....	189·19	...	...	...	...	...	.....	...	...	...	...	.....	.....	...	...	...	...	
Total	...	4,593·46	5,349·92	7·29	13·25	175·23	162·30	629·56	1,022·01	146·46	214·79	116·20	119·45	1,074·74	1,531·80	50,520	118,401	13·61	8·23	

The increase in area shown in column 4 is nominal only, because the tracts added therein were not settled on cadastral results during the year. Consequently, in the added tracts there was nothing for the district officers to deal with.

The check lines run by Deputy Commissioners are confined to 9·49 linear miles done by Mr. Kennedy in Nowgong, and 1·06 linear miles by Mr. Monahan in Sibságar. In Barpeta, Mangaldai, and Jorhát the Subdivisional Officers did a very little in this direction. The reason so little was done probably is that resettlement work very largely engrossed the time of the European officers in all districts but Goálpára and Lakhimpur. Sub-Deputy Collectors did less than in the previous year, owing to the falling off in Gauháti, Mangaldai, and Jorhát. In Gauháti the cause was the illness of Massiat Ulla early in the year and the newness to his charge of Bhola Nath, the succeeding Sub-Deputy Collector. In Mangaldai the reason was the incompetence of Jogeswar Barkataki, to which reference has already been made. In Jorhát little could be done during the year, because the Officiating Sub-Deputy Collector, Jagat Bandhu Das, fell ill almost immediately *after* joining, and was unable to go into camp. Supervisor *kanungos* did much better in the matter of testing than they had done in 1891-92, except in Mangaldai and Jorhát. In Kámrúp and Nowgong the improvement in the check line mileage was marked. Tahsildárs also show an increase and that in all districts. From mauzadárs much cannot be expected. On the whole, there is creditable increase, the check lines working out one linear mile to every 3·04 square miles of surveyed area.

The figures showing the area of fluctuating cultivation are not very reliable, as it is doubtful if district officers have yet properly grasped what is required. But those given for 1892-93 are probably nearer the truth than those of the previous year. Assuming this to be the case, the *pertal* mileage gives us 8·23 linear miles per square mile of fluctuating area, which, if the lines were all confined to fluctuating tracts, as the majority certainly were, gives an amount of checking which is more than enough to keep the cadastral maps as accurate as when they were received from the Survey Party.

22. In the following statement figures are given showing the test measurements carried out in unsurveyed tracts during the year under report and that which preceded it.

Testing in unsurveyed tracts.

District.	Subdivision.	Total area in square miles unsurveyed in		Area in acres ascertained by test measurement by								Area as given by mandals.		Percentage of error.	
				Deputy Commissioners and Subdivisional Officers.		Sub-Deputy Collectors.		Tahsildars.		Mauzadars.		Total.			
		1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
Goálpára ...	Dhubri ...	2,384·00	2,384·00	.....	.....	.. ..	342	.....	1,257	1,276	1,360	1,276	2,959	1,303	2,830	+ 2·07	— 4·55
	Goálpára* ...	1,570·00	1,570·00	.....	.....	.....	.....	.....	... ..	.....	.....	.....	.....	.....	..	... ..	... ..
Kámrúp ...	Barpeta ...	853·71	626·79	61	65	.....	235	597	1,469	705	5,256	1,363	7,025	1,342	7,096	— 1·56	— 0·27
	Gauhati ...	1,104·32	1,104·32	.....	.....	57	.....	1,392	5,192	247†	18	1,696	5,210	1,651	5,001	— 2·72	— 4·18
Darrang ...	Mangaldai ...	695·53	598·55	109‡	109§	.. ...	66	.....	363	75	662	184	1,191	186	1,204	+ 1·07	+ 1·08
	Tezpur ...	2,173·00	1,959·90	9	.....	287	658	158	2,661	60	.....	514	3,319	480	3,096	— 7·08	— 7·20
Nowgong ...	Nowgong ...	2,257·46	2,257·46	.....	261	21	44	.....	..	63	2,145	84	2,450	83	2,432	— 1·20	— 0·74
Sibságar ...	Golághát ...	615·48	615·48	.....	.....	106	212	.....	.....	51	653	157	865	142	790	—10·56	— 9·49
	Jorhát ...	434·07	283·86	97	.....	56	303	.....	... ...	143	176	296	479	273	436	— 8·42	- 9·86
	Sadr	402·97	402·97	.....	7	507	119	.....	.....	.....	.. ..	507	126	503	113	— 0·79	—11·50
Lakhimpur...	North Lakhimpur ...	1,161·00	1,080·94	45	10	... ..	492	...	.....	392‖	1,932	437	2,434	384	2,066	—13·80	—17·81
	Dibrogarh ...	2,563·00	2,378·81	69¶	5	404	.....	.....	...	1,505**	3,436	1,978	3,441	1,611	2,705	—22·78	—27·20
	Total	16,214·54	15,458·08	390	448	1,438	2,471	2,147	10,942	4,517	15,638	8,492	29,499	7,958	27,679	— 6·71	— 6·57

* Permanently settled.
† Includes the area tested by the Deputy Surveyor
‡ Ditto ditto Extra Assistant Commissioner.
§ Ditto ditto Babu Akhaya Kumar Chatterji
‖ By the Revenue Sheristadár and the sub-Deputy's Clerk.
¶ By the Extra Assistant Commissioner.
** By the Government surveyor and the Sub-Deputy's Clerk.

The area shown in columns 3 and 4, being almost entirely waste, gives a very incorrect idea of the actual tract in which check measurements after the old mauzadári fashion are possible. The actual area of this tract, which is now only 476·91 square miles, is decreasing year by year, and in another three or four years should disappear. During the year under review a considerable increase is shown over the figures of 1891-92, all classes of officers contributing to the improvement. Except in Dibrugarh, where the time of the Sub-Deputy Collector was largely taken up by work given to him by the Cadastral Survey Settlement Officer; in the sadr subdivision of the Sibságar district, where Babu Phanidhar Chaliha had an exceptional amount of work in the surveyed tracts; and in the sadr subdivision of the Kámrúp district, where extensions of survey largely reduced the non-cadastral area during the cold weather, the Sub-Deputy Collectors of all subdivisions tested more land than in the previous year. A similar statement is true of all tahsildárs except those newly-appointed in Nowgong and Sibságar. The increase in the area tested by mauzadárs is very marked, and the final figures show that the area done in 1891-92 was more than trebled during the year under report. The net result of error is very similar to what has been frequently noticed before, *viz.*, that mandals' measurements conducted under the mauzadári system are more than 6 per cent. under the truth. In the Mangaldai subdivision the error was found on the other side, *i.e.*, the mandals' figures were slightly in excess of the truth. The greatest errors were found in the Dibrugarh and North Lakhimpur subdivisions in both years, but the Golághát and Jorhát deficiencies were also serious. In the sadr subdivision of Sibságar, although the percentage of error was high, the area measured was too small to afford a safe criterion as to the state of the rest of the unsurveyed tract.

Registrar kanungos.

23. A kanungo on a salary of Rs. 40 to Rs. 60 a month has been always entertained at the headquarters of each district. The ostensible duty of this officer was to check the mauzadars' papers as they were brought in for the annual settlement to be made. This duty was very much more than one man could perform, and it was therefore carried out perfunctorily or neglected altogether. As far as the cadastrally-surveyed areas are concerned, the work of checking has been long since transferred to the supervisor kanungos, but the kanungo at headquarters is still supposed to exercise some check over the papers of the areas not yet cadastrally surveyed. As these year by year get less voluminous, his duties in this direction are diminishing. But in connection with the cadastrally-surveyed area he has new duties to perform. It is his business now to prepare any tabular revenue statements that are required, to keep the maps, forms, and instruments annually wanted by the mandals, to see that supplies of diary books are ready for them, and to keep them and the supervisor kanungos properly supplied with stationery. Further, the mandals' weekly diaries now come to him, and he has to prepare the consolidated statement of work done by the mandals submitted weekly to the Deputy Commissioner. As these duties became gradually more onerous with the extension of the survey, the Sub-Deputy Collector's clerk became more and more the kanungo's assistant. In subdivisions there had never been a stationary kanungo similar to the one at headquarters, and the work of preparing the weekly consolidated statement and looking after the maps and forms, &c., had devolved sometimes on the Sub-Deputy Collector's clerk and sometimes on one of the revenue clerks of the generally over-worked subdivisional office. This state of things was found unsatisfactory, and an officer, to be called "Registrar Kanungo," was appointed for each subdivision except Goálpára, during the year under report,* the title of the kanungo at the headquarters being at the same time altered to "Registrar Kanungo." The Sub-Deputy Collector's clerk as such was abolished, but reappeared in each headquarter† and subdivisional office as Assistant Registrar Kanungo,‡ there being ample work to occupy the two men. The Registrar Kanungo's offices at Gauháti, Barpeta, Nowgong, Golághát, Jorhát, and Sibságar were inspected by both Mr. O'Donel and me. The Mangaldai office would have been inspected, but that the kanungo could not be spared to come to my camp when I was in the subdivision, and I was unable to visit Mangaldai itself. Those at Dibrugarh, North Lakhimpur, and Tezpur only began dealing with cadastral survey work after the year closed.

In Gauháti the condition of the office showed a marked improvement as compared with last year. There was, however, some delay in the prompt submission of the weekly consolidated statements of mandals' diaries. The attention of the Deputy Commissioner was drawn to a few minor irregularities. The Barpeta office had only been started a short time before my visit, and was working well. In the Nowgong office the registers were in fair order, but the submission of the weekly consolidated statement of mandals'

* *Vide* Secretary to Chief Commissioner's No. 1854, dated the 4th March 1892.

† Tezpur is an exception, there is no Assistant Registrar Kanungo there, as the Deputy Commissioner considered such an officer unnecessary.

‡ *Vide* Secretary to Chief Commissioner's No. 7173G., dated the 16th August 1892.

diaries was not as punctual as was desirable. In the Golághát office the Map Issue and Sale Registers required alteration. So did the Detail Instrument Register. The other registers were in good order. At Jorhát the Map Issue Register was not in the prescribed form, and the system of dealing with the weekly consolidated statements of mandals' diaries was irregular. In Sibságar it was found that the weekly fine for non-submission of diaries was not inflicted till two weeks had passed without a diary. This is of course irregular. The Map Issue Register was not complete, all the maps received not having been entered and all those issued not deducted. The Instrument Register had only been started a short time before my visit, and there were hardly any entries. The Detail Instrument Register had not been begun. Altogether, the work of the office was in a very unsatisfactory condition, owing mainly to the inefficiency of the permanent Registrar Kanungo, who was on leave at the date of my visit. Arrangements for removing him have since been made.

New supervisor kanungoships.

24. During the current year the first settlement on cadastral survey results will be made in the area of 756·46 square miles surveyed in Kámrúp, Darrang, Sibságar and Lakhimpur, and, as is usual in districts where this takes place, new supervisor kanungoships were formed. In Darrang three, in Sibságar one, and in Lakhimpur three, new posts were created, and experienced men transferred, since the year closed, from other districts to fill them, to enable the new work to be started with some measure of success. Although not coming strictly within the scope of the year's operations, the details below are given because available, and because they supply almost final figures for the cadastrally-surveyed area. The extensions of cadastral survey to be annually made in future, will not for some time materially affect the areas of the kanungos' circles. The whole of the cadastrally-surveyed area (including the 111·64 square miles done in 1889 and 1890 during the Barpeta experimental survey, and the 21·46 square miles done in 1891-92 as an extension of that survey, but not the areas surveyed in different districts during the last cold season) now amounts to 5,349·92 square miles and has been divided into 40 supervisor kanungos' circles. The full details as to each of these circles are given in Appendix H, but the abstract below compares the averages of the different districts.

District.	Total cadastrally surveyed area in square miles up to the close of 1892-93.	Total number of kanungos.	Areas, *khirój* area in square miles.			Average *nankhirój* area in square miles.	Average *kakhirój* area in square miles.	Average waste land grants in square miles.	Total average area in square miles.
			Cultivated.	Waste.	Total.				
Kámrúp	1,099·89	14	44·05	58·64	103·17	14·58	3·21	0·46	121·42
Darrang	857·10	6	49·33	79·11	128·94	8·74	0·89	4·27	142·84
Nowgong	1,062·99	8	48·14	72·68	121·02	0·95	0·38	3·03	125·38
Sibságar	1,520·69	9	69·14	65·98	135·32	0·70	6·50	26·45	168·97
Lakhimpur	269·25	3	40·58	34·33	74·91	0·63	1·25	12·97	89·76
Total	5,349·92	40	51·45	64·26	115·71	6·81	2·89	8·33	133·74

[1] Exclusive of the 168·13 square miles by *mandals* in 1892-93.

It will be observed that the Sibságar circles are much larger and those of Lakhimpur much smaller than the others. The large size of the Sibságar circles does not mean a proportionate excess in work, partly because the area is largely composed of grants which give no work to a supervisor kanungo, and partly because of the permanence of the *khirój* area. The only circle with a considerable extent of fluctuating cultivation is that recently formed in the Majuli, and here it will be noticed from Appendix H that the *khirój* area, on the extent and character of which the work of a supervisor mainly depends, is much smaller than that in any other circle of the district.

In Lakhimpur the smallness of the circles is due to the size and situation of the blocks of country which were surveyed. In North Lakhimpur the portion surveyed was only 75·86 square miles. To this nothing could be added from the sadr subdivision, as no part of the surveyed areas in the two subdivisions were sufficiently near each other, except a small fragment of mauza Demaji (consisting of 4·20 square miles), which being far from the main body of the work in the sadr subdivision, and adjoining a piece of that in North Lakhimpur, has been included in the kanungo's circle of the latter subdivision. The area surveyed in the Dibrugarh subdivision, excluding the fragment of Demaji, is 189·19 square miles, with 79·09 square miles of *khirój* area. This would have been too large a charge for one man, especially in the beginning, when all the mandals are new to the work. Consequently two posts had to be created for it.

25. Taking into consideration certain additions sanctioned since the close of the year, we are in a position to give in the statement below almost final figures for the average size of the mandals' circles as now fixed in each district. The figures in columns 2 and 3 will yearly increase, but the alterations in the other columns will not be very great.

Average size of mandals' circles.

District.	Total surveyed area in square miles.	Total number of mandals in the cultivated area.	Average *khirāj* area in acres per mandal. Cultivation.	Waste.	Total.	Average *net-khirāj* cultivation and waste in acres per mandal.	Average *la-khirāj* cultivation and waste in acres per mandal.	Average grants in acres per mandal.	Total average area in acres per mandal.	Remarks.
1	2	3	4	5	6	7	8	9	10	11
Kámrup	1,699·89	293	1,756	2,102	3,858	923	715	19	4,555	In the area surveyed in Barpeta in 1891-92 ten mandals.
Darrang †	885·10	167	1,768	3,239	5,007	514	32	153	5,126	† In the area surveyed in 1891-92, 14 mandals and 29 mandals in the cadastrally-surveyed area of Tezpur subdivision.
Nowgong ‡	1,052·99	149	1,661	2,497	4,158	32	13	101	4,208	‡ Five new mouzas added, viz. this office letter No. 4169, dated the 16th August 1893, to Deputy Commissioner, Nowgong.
Sibságar §	1,330·09	181	2,218	2,088	4,306	22	267	582	5,177	§ *Golághát.*—Four mzs added in Abor agaci and an estimate of three mzs more to be added in 1893. *Jorhát.*—Ten mzs added in Sámaro and an estimate of five mzs to be added in 1893. *Dikomorah.*—Twenty-five mandals in the surveyed area and three more added by this office letter No. 4239, dated the 23rd August 1893. *North Lakhimpur.*—Twenty-one mandals' circles surveyed. When redistribution takes place there will be about 16 mandals in the surveyed area.
Lakhimpur	269·28	44	1,771	1,498	3,269	27	84	186	3,916	
Average total	5,349·25¶	731	1,892	2,253	4,089	239	101	202	4,684	¶ Exclusive of the 1893 square miles surveyed by mandals in 1892-93.

26. The area originally taken up for the Barpeta experimental survey was completed in the summer of 1891, by the mapping of two mandals' circles in mauza Ruposi. In the succeeding cold weather operations were extended to two more circles of that mauza, and before the regular settlement of 1892 an area of 21·46 square miles had been finished, and the settlement made on the results of the survey. This work was done entirely under the management of the tahsildár of Roha, Keshab Chandra Singh, and the supervisor kanungo, Bhogirath, and the result was a net gain of Rs. 416 in revenue. I inspected the maps when at Roha in April 1892, and checked some of the work in the field last February with very satisfactory results. A reward of Rs. 156, at Rs. 2 per 100 acres, was given to the mandals who did the survey, and a douceur of one month's pay (Rs. 40), to the supervisor kanungo, in recognition of the fact that this extension of survey had been done over and above their ordinary work. No other expenditure was incurred.

Extension of survey.

In the autumn of 1892 I arranged with the Deputy Commissioners of Kámrúp, Nowgong, Darrang, and Sibságar that the cadastrally-surveyed area of their districts should be extended by causing certain of their kanungos, on the boundaries of whose circles unsurveyed land lay, to carry out the survey of a few square miles each of this land, by the aid of their mandals.

In the Barpeta subdivision, a total area of 41·00 square miles was surveyed, which, owing to some unexplained cause as to which enquiry is being made, is reported to have led to a decrease in *khirāj* area of 205 *bighás* and a loss of revenue at the old rates of Rs. 64. In the Sadr subdivision of Kámrúp a survey of 25·92 square miles led to an increase of 381 *bighás* in area and of Rs. 394 in revenue. In Mangaldai an area of 3·08 square miles was surveyed, with the result of a decrease in area of 34 *bighás* and a falling off in revenue of Rs. 3. In Nowgong the total area done was 33·14 square miles, the *khirāj* area gained being 2,926 *bighás* and the extra revenue obtained Rs. 1,546. In the Sadr subdivision of Sibságar the total area surveyed under the 3 kanungos was 34·96 square miles, the increase in *khirāj* area being 954 *bighás* and in revenue Rs. 772. In Jorhát the survey of 15·81 square miles brought about a rise of revenue of Rs. 356 on an area increase of 439 *bighás*. In Golághát the tracts done came in all

to 24·22 square miles with a *khirij* area increase of 3,054 *bighás* and a revenue rise of Rs. 1,068. The total increase in area on the year's work was 7,515 *bighás* and the total rise in revenue Rs. 4,669 according to the old rates and Rs. 11,514, when the new assessment rates are applied. The rewards to be given will be calculated as usual at one month's pay to each kanungo and Rs. 2 per hundred of half the total of acres and fields to each mandal. This on the tracts surveyed amounts to Rs. 1,840 (exclusive of the *amount due to the mandals and kanungos of Mangaldai which could not* be ascertained *owing to want of certain information which has been called for*) and the annual gain in *revenue comes therefore to be over six times the expenditure incurred.*

During the course of my cold weather tour, I inspected the maps at Roha and Dhumdhuma in Kámrup, at Dhing in Nowgong, and at Golághát, Gosaingaon, Kakájan, and Gauriságar in Sibságar. At Mangaldai, owing to a misapprehension, the work had not been begun when I was there in February. It was started shortly afterwards, and final figures have only just come in. In all the abovementioned places except the last I found that good progress had been made. Both at Roha and Dhumdhuma the boundary survey, beyond which little had been done at the time of my visit, was, I found, accurate.

The system of extending the cadastral survey by local agency to tracts for which it would not be worth while to employ professional surveyors, may be now said to have been fairly started. In 1892, 21·46 square miles were surveyed, and during the current year an extent of 188·13 square miles has been completed. The cost of the 21·46 square miles amounted to Rs. 9·1 per square mile rewards to this extent having been given, but the increase of revenue exceeded this total expenditure by Rs. 220. The cost of the 188·13 square miles just completed will amount to about Rs. 10-8-0 per square mile, but the revenue gain will at the new rates exceed this by more than Rs. 9,500.

Thus, by the Barpeta experiment of 1890, not only was an area of 116·64 square miles cadastrally-surveyed and settled on the results of the survey, at a cost of Rs. 50·45 a square mile, but a system was inaugurated by which it is anticipated that the whole of the remaining unsurveyed area of the Assam Valley districts will eventually be surveyed without costing Government anything. Further than this, the opportunity has been taken to teach practical surveying to as many as possible of the hitherto untaught mandals and local candidates for employment by drafting them into the extension survey camps; so that the system of annually extending the cadastrally-surveyed area gives us, in addition to an annual increase of revenue resulting from the more accurate measurements, the most efficient form of survey school it is possible to have.

One more matter should be referred to in this connection. So far, the boundary survey has been done by plane-table measurements, but I propose next year, if possible, as arrangements have been made for teaching a few men during the rains, to substitute a regular theodolite traverse. In the Superintendent of Land Records, Mr. O'Donel, the Province has a professional surveyor, who can be utilised to teach the use of the theodolite, and is doing so now to one Sub-Deputy Collector, and a few selected mandals and kanungos.

Some of the extensions could be done next season with the theodolite, instead of with the sight-rule and plane-table, and when the whole of the area now awaiting survey is finished, the portion completed up to the present with the plane-table can be checked by the theodolite. There would be no difficulty about this, as all the plane-table traverse and subtraverse stations have been permanently marked with mounds and growing *semal* boughs.

Theodolite station marks.

27. The statement given in Appendix I purports to show the condition of the various theodolite stations on the 30th June 1892. The figures are more reliable than those given last year, but cannot be implicitly trusted yet. The difficulty in making them accurate is due to the fact that a very large number of stations lie on the boundaries of mandals' and kanungos' circles, and are liable therefore to be counted twice over. It will be impossible to make sure of accuracy till regular maps on a small scale of each mandal's circle are made out, giving the exact position of every theodolite station and showing for which stations each separate mandal is responsible. With a view to getting this done, I am having traces of the area in charge of each kanungo prepared on the scale of two inches to the mile. These traces show by separate marks—

(*a*) theodolite stations which are also village trijunctions (triangle),

(*b*) theodolite stations on the boundary of a mauzá (red circle),

(*c*) theodolite stations on the boundary of a village (black circle),

(*d*) theodolite stations in the interior of a village (blue circle).

From these the kanungos will be able to prepare a map of each mandal's circle, and the initial difficulty arising from not knowing the exact number of the stations to be dealt with will no longer exist.

Percentage of living boughs.

28. During the past cold weather I made a point in the course of my tours of counting as many theodolite stations as possible, with a view to seeing what number were permanently marked by living *semal* trees, and in how many cases the bough originally planted was dead or had disappeared. I asked Mr. O'Donel also to look into this matter, and requested that it might be noticed in the diaries of Sub-Deputy Collectors. The statement below shows the result of this enquiry :

District or subdivision.	Inspected by Director of Land Records during the cold weather tour.			Inspected by Superintendent of Land Records from 1st December 1887 to 31st May 1888.			Inspected by Sub-Deputy Collectors from 24th December 1887 to 31st May 1888.			Inspected by all.		
	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.
Barpeta	54	52	96·30	42	20	47·62	106	98	92·45	280	272	81·54
Gauhâti				43	34	79·07	15	8	53·33			
Mangaldai	45	41	91·10	...	...	...	384	377	98·18	454	443	97·58
Tezpur				...	...	...	25	25	100·00			
Nowgong	299	245	81·27	111	82	73·88	508	396	77·95	918	801	75·27
Golâghât	108	78	72·22	103	80	77·67	86	80	93·02	1,005	736	73·23
Jorhât				138	77	55·80	167	115	68·86			
Sadr Sibsâgar ...				196	128	68·81	217	178	82·03			
North Lakhimpur ...	...	...	...	...	...	...	86	66	76·74	86	66	76·74
Dibrugarh	...	...	...	...	...	...	267	251	94·01	267	251	94·01
Total	506	14	81·82	623	421	67·58	1,861	1,564	84·04	2,990	2,369	80·23

According to this, it would seem that, out of 2,990 stations examined, it was found that the *semal* bough had struck root in 2,369 instances, or that over 80 per cent. of the theodolite stations marked were now permanently fixed. As these stations were examined at random all over the valley, it would at first sight appear that over 80 per cent. of all theodolite stations might be regarded as now permanently marked. But this is too sanguine an estimate. First, because the stations counted were generally those most easily inspected from roads, though of course a large number far away from roads were also included. The mandals would naturally pay the most attention to the repair of such stations as were likely to be inspected to the neglect of others more out of reach. Secondly, because if, in any case, bough and mound had both disappeared, such a station would escape observation altogether, and therefore would not be counted. Consequently, the actual percentage of living boughs is not as high as would appear from the figures of the statement. On the other hand a considerable number of stations are marked by prisms, and these have not been included in the table above. All things considered, I think that the examination made last cold weather has given fairly satisfactory results, and has shown that, whatever the exact figures may be, a very large percentage of theodolite stations are now permanently marked and will give little further trouble, so that the attention of the local officials can be concentrated on those which still require repair. The demarcation maps mentioned in the preceding paragraph will enable supervising officers to exercise a check not hitherto possible, and should result in the permanent marking, on a system which costs nothing, of every single theodolite station fixed by the survey party since 1885-86.

II.—Analysis of Districts with reference to Security from Famine.

III.—System of Collection of Revenue and Rental in Precarious Tracts.

IV.—Measures of Protection.

Famine.

29. As observed in previous reports, famine is happily unknown in this Province, and there are no precarious tracts where protective measures are required. It may be mentioned, however, that last year there was a temporary scarcity in Sunâmganj owing to the partial failure of the *boro*

crop, the principal food-grain of the people of that quarter. The early floods destroyed a large portion of this crop just when it was ripe for cutting, and prices went up for a short time. As the floods subsided, prices fell and the difficulty was at an end.

V.—Agricultural Experiments.

Crop experiments.

30. The usual annual Note on crop experiments carried out during the year was submitted to the Chief Commissioner with my letter No. 2888, dated the 18th May 1893. Besides this, under orders of the Government of India conveyed in Revenue and Agricultural Department Circular No. 3-47, dated the 20th February 1892, a special return showing for each district of Assam the average yield per acre of each of the principal crops was compiled during the year from the returns of the ten years ending with those of 1891-92, and submitted to the Chief Commissioner with my letter No. 1804, dated the 16th June 1892.

Citron plantation.

31. The small plantation of Malta oranges, citrons, and lemons near Therriaghat was kept clear of jungle, and the trees are reported to be doing well.

Silk experiment.

32. In August last the Director, Department of Land Records and Agriculture, Bengal, forwarded to me for distribution copies of a report on certain silk experiments carried out by Babu Nrytin Gopal Mukerji, together with copies of a notice offering healthy silkworm "seed" for sale. Both the report and the notice were distributed to the Deputy Commissioners of the silk rearing districts of Assam, but it was then too late in the season for seed to be successfully reared. A packet of seed was, however, sent to me for experiment, and I forwarded it to Mr. Rita, Subdivisional Officer, Jowai, requesting him to give the consignment a fair trial. As the parcel was delayed in transit, the eggs were found to have hatched out and the worms to be dead. A second consignment was then sent direct to Mr. Rita, and the seed was made over for experiment to a village headman, who has considerable experience in silk-rearing. The results of the experiment have not yet been communicated.

Silk cocoons for Queensland.

33. The Government of Queensland having applied to the Government of India for live cocoons of silkworms of Indian varieties, I received instructions to arrange for the despatch of consignments of the two more important Assam species, the *Eri* (*Attacus ricini*) and the *Muga* (*Antheræa Assama*). Specimen boxes were forwarded by the authorities of the Indian Museum, and in these two consignments of *Eri* worms were despatched, one in March and one in April 1893. I saw to the construction of other boxes when I was at Gauhâti in January, and personally explained how the cocoons were to be packed. A number of *Muga* cocoons were to be sent off subsequently, as soon as procured.

Samples of silk for America.

34. With a view to exhibit at the Chicago Exposition a complete collection of the wild silks used in commerce, Mr. Philip Walker, Chief Special Agent, United States Department of Agriculture, applied for some samples of the products of Assamese silk. The Deputy Commissioner of Kámrúp accordingly despatched to him, through the American Consul General at Calcutta, a packet containing one pound of cocoons and two pounds of thread of each of the two principal varieties of Assamese silk—"*Eri*" and "*Muga*"—as well as a few samples of the textile fabrics made from them by the Assamese.

Potatoes.

35. Under the orders of the Government of India, conveyed in Revenue and Agricultural Department Circular No. 30—105, dated the 17th August 1892, some specimens of diseased potatoes grown in the Khási Hills were forwarded for examination to Dr. Cunningham, the special Assistant to the Sanitary Commissioner to the Government of India. Dr. Cunningham found the disease to be the common potato rot of Europe due to the presence of *Phytophthora infestans*, an abundant growth of which fungus was discovered in the shoots and leaves of the specimens sent.

Three maunds of potatoes were supplied, at his desire, to Mr. J. H. H. Rolfe, Steamer Agent, Kokilamukh, who tried to introduce the crop amongst the Miris at that place and at Jhansimukh. The experiment proved a failure, as the resulting potatoes were of small size, and the outturn was only just double the amount of seed sown. Mr. Rolfe, however, attributes this to lateness in sowing, and anticipates greater success next year.

Indigo.

36. In September last the Superintendent of the Government Botanical Gardens, North-Western Provinces, asked to be supplied with some seeds or cuttings of the *ium* plant (*Strobilanthes flaccidifolius*). As the plant is said not to seed, and is therefore generally propagated by cuttings, a consignment of some forty cuttings was accordingly sent to Saharanpur in December last.

At the request of the Director, Department of Land Records, North-Western Provinces, some cuttings were also sent at the same time to Messrs. Bigg, Sutherland, & Co., of Cawnpur.

VI.—CATTLE.

Cattle disease.

37. In accordance with the orders of the Government of India in Revenue and Agricultural Department letter No. 124C., dated the 28th January 1890, the subject of cattle disease is to be annually dealt with in this report. The following statement shows approximately the number of deaths during the past two years, but the details are very unreliable:

District.	2	3	4	5	6	7	8	9		10	
	Rinderpest.	Foot and mouth disease.	Scarcity of food and fodder.	Diarrhœa, dysentery, and black leg.	Anthrax.	Cachexia.	Other diseases.	Total.		Estimated value of cattle.	
	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.	1891-92.	1892-93.
																			Rs.	Rs.	Rs.	Rs.
Cachar	..	..	..	..	..	..	..	..	..	..	..	..	500	..	500	....*	3,98	....				
Sylhet	1,612	5,158	1,190	1,992	3,077	4,022	2,489	7,511	9	..	304	332	7,467	11,832	10,823	20,218	1,14,781	2,34,274				
Goálpára	2,047	7,05	8,15	1,197	7,884	1,726	5,49	2,655	601	211	9.5	855	6,527	412	34,742	11,678	1,46,821	56,190				
Kámrúp	3,567	6,263	8,936	18,127	..	..	7,719	18,653	..	..	..	..	6,908	13,393	26,6998	56,742	1,60,004	2,89,013				
Darrang	..	..	2,793	2,621	1,7o5	1,508	3,711	9,029	..	..	..	..	3,912	3,234	12,260	10,363	1,19,116	1,12,147				
Nowgong	..	..	..	..	..	..	9,.1	17,545	..	..	..	..	4,147	4,945	13,478	22,490	97,446	1,27,430				
Sibságar	10,749	601	..	..	..	..	1,732	..	..	..	..	..	3,609	..	5,031	10,760	85,241	1,18,459				
Lakhimpur	..	..	..	..	..	..	877	4,451	..	..	..	..	..	..	877	4,451	8,750	44,510				
Nága Hills	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....†	....†	....	....				
Khási and Jaintia Hills ..	..	..	72	109	..	..	..	98	..	..	..	..	883	72	1,000	570	8 720					
Gáro Hills	..	..	95	..	2	..	5	..	..	..	..	..	50	99	50	940	6 0					
Total	18,902	27,068	21,008	24,212	19,074	6,856	31,859	60,441	700	311	1,232	917	32,080	34,243	110,987	154,790	7,64,881	12,63,039				

* Statistics not furnished.
† The figures published in the Report of 1891-92 did not include those of Barpeta, owing to non-receipt in time.
‡ The Deputy Commissioner is unable to furnish statistics.

In Kámrúp cattle-disease was prevalent throughout the year, especially during the months of May and August, when it assumed a virulent form. The death-rate in the other districts of the Assam Valley was normal.

In the Khási Hills cow-pox and foot-and-mouth disease appeared in certain localities and carried off 1,090 head of cattle. In the Gáro Hills a few cattle died of cow-pox in the plains mauzas on the border of the Goálpára district. The Deputy Commissioner, Nága Hills, is unable to furnish any statistics, but reports that many cattle died of cow-pox, bowel-complaints, and foot-and-mouth disease.

The Deputy Commissioner, Cachar, reports that there were very few deaths from cattle disease in his district during the year. In Sylhet, the mortality was higher than in the preceding year, and the most prevalent diseases are said to have been rinderpest and diarrhœa. In the Jaintia parganas the death-rate in the latter part of the cold weather was unusually high.

Breeding bulls.

38. Of the three Kenwari bulls imported in 1886, one, sent to the Sonthal Colony, died of rinderpest in June 1892, and the other two were stationed one at Sibságar and one at Gunjong in the North Cachar Hills throughout the year.

The following statement gives details as to the cost of keep and work done by the surviving bulls:

District.	Wages of keeper.	Cost of food.	Miscellaneous.	Total.	Number of coverings.		Remarks.
					1892-93.	1891-92.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.			
Sibságar	103 0 0	50 5 6	24 10 0	177 15 6	16	10*	*Sadr 5 and Jorhát 5.
Cachar	.....	59 0 10	4 7 1	63 7 11	34	35	
Total	103 0 0	109 6 4	29 1 1	241 7 5	50	45	

The result is as usual unsatisfactory. The bull at Gunjong is reported by the Subdivisional Officer as too old now to be of any further use. Its sale has been proposed.

Of the Kenwaria bulls owned by private persons at Mangaldai one belonging to mauzadár is reported to have covered 21 cows, and one was loose and no record of his coverings was kept. Nothing is known with respect to the others.

VII.—Agricultural and Fiscal Statistics.

Agricultural and fiscal statistics.

39. These are comprised in return No. 41B., and are separately submitted every year. The instructions regarding the compilation of this return were during the year under report thoroughly revised by me and modified, so as to suit the altered circumstances of the different districts of Assam, and the changes in the forms prescribed by the Government of India. A circular consolidating all the instructions which have been issued at different times up to date was prepared during the year, and has since been submitted for the approval of the Government of India.

VIII.—Trade and Trade Statistics.

Trade reports.

40. The Annual Report on the River-borne Trade of the Province was published in November 1892. Quarterly reports dealing with river-borne trade issued regularly.

IX.—Miscellaneous.

Miscellaneous.

41. The following subjects are referred to in this report, in accordance with the orders of the Government of India or the Local Government conveyed from time to time :

Fuel and fodder reserves.

42. As explained in previous reports, the subject of Fuel and Fodder Reserves is of no immediate practical importance as far as this Province is concerned.

Locusts.

43. There is nothing to note under the head of Locusts. The Province is practically free from the ravages of these insects, although small flights are frequently reported.

Bones as manure.

44. Bones are never used in Assam as manure, except (rarely) by tea-planters, and there is no export or import trade worth mentioning in this commodity.

Insect pests.

45. No action was taken in regard to insect pests.

State patronage of Mahomedans.

46. There was no Mahomedan in superior service under this Department during the year.

Rainfall registration.

47. As noticed in the report for 1891-92, the supervision of rainfall registration in Assam was transferred to my office in March 1890. During the year under report the budget provision under this head has also been transferred to the control of this office. Under the existing arrangements weekly and monthly returns are published in the Local Gazette, and printed copies of the latter are forwarded to the Meteorological Reporter to the Government of India.

The total number of rainfall stations at the close of the year was 94 (43 under Government management and 51 under the control of tea-planters) against 89 in the preceding year. Three of the additional stations, viz., Badarpur, Tambulpur, and Attarikhat, were newly opened, and two, namely, Nemoti and Manipur, were old stations re-opened. During the year one Symon's gauge and ten measuring glasses were supplied. Every station (except those of Lakhimpur, on account of which 10 additional glasses have been indented for during the current year) is now provided with a gauge of Symon's pattern and two measuring glasses, and other necessary apparatus. Appendix J gives details as to the number of stations in each district and the instruments supplied to them. One copy of the local gazette is sent gratis to each non-official who furnishes rainfall statistics.

48. The following statement shows the number of rain-gauges that were inspected by Deputy Commissioners, Subdivisional Officers, and Civil Surgeons during the year:

In-spection of rain-gauges.

1	2	3	4	5	6	7	8	9	10
District.	Total number of rain-gauges.	Inspected by Subdivisional Officer or Deputy Commissioner.	Inspected by Sub-Deputy Collector.	Inspected by Civil Surgeon.	Total number of inspections.	Defect number inspected twice.	Balance of gauges inspected.	Number not inspected.	Remarks.
Sylhet ...	11	2	*Nil*	1	3	*Nil*	3	8	
Cachar ...	10	3	1	*Nil*	4	*Nil*	4	6	
Gáro Hills ...	1	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	1	
Khási and Jaintia Hills ...	3	2	*Nil*	2*	4	1	3	*Nil*	
Nága Hills ...	5	1	*Nil*	*Nil*	1	*Nil*	1	4	
Manipur ...	1	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	1	
Goálpára ...	5	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	5	
Kámrúp ...	16	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	*Nil*	16	
Darrang ...	12	*Nil*	*Nil*	1	1	*Nil*	1	11	
Nowgong ...	7	1	*Nil*	4	5	.....	5	2	
Sibságar ...	11	*Nil*	*Nil*	5	5	*Nil*	5	6	
Lakhimpur ...	12	2	*Nil*	*Nil*	2	*Nil*	2	10	
Total ...	94	11	1	13	25	1	24	70	

* One of these inspections was made by Dr. Griffiths of Cherra Punjee.

49. In accordance with the orders of the Government of India, conveyed in the Circular No. 23-103, dated the 29th June 1892, of the Revenue and Agricultural Department, to the address of the Chief Commissioner, forwarded to me for necessary action, I requested Deputy Commissioners and the Political Agent, Manipur, to arrange for the preparation of a list of the local agricultural implements, machines, and contrivances in use in the several districts of Assam to be accompanied by a drawing in outline or a photograph of each implement. Drawings and descriptive lists have been received from some of the districts, the drawings forwarded by the Deputy Commissioner, Kámrúp, and prepared by a native artist, being particularly good. As soon as the information is complete, a consolidated list illustrated by drawings and photographs will be prepared for the whole Province in the manner prescribed by the Government of India.

Agricultural implements.

50. In accordance with the Circular of the Government of India, Revenue and Agricultural Department, No. 30-15, dated the 16th July 1892, a sum of Rs. 500 is annually included in my budget for expenditure on the purchase of specimens, the institution of enquiries, and other similar objects, connected with the Imperial Institute, London. As a step towards the fulfilment of these objects, some *thapa*-leads of Khási and Mikir Hills cotton, two pieces of cotton cloth (one made by the Khásias and the other by the Mikirs), ten pieces of *Eri* cloth, and a small quantity of *Eri* cocoons, were despatched last year to the address of the Reporter on Economic Products to the Government of India, for despatch to the Imperial Institute.

Economic products for the Imperial Institute.

51. The statement below gives details as to the expenditure incurred by this Department during the year, and compares the figures with those of the previous year :

Expenditure.

Year.	Director's Head Office.			Settlement Offices.			Survey Schools.			Total.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1891-92 ...	15,093	9	5	45,179	9	10	1,569	11	4	61,842	14	7
1892-93 ...	*29,965	3	1	†47,719	1	3	1,487	9	3	79,171	13	7

This includes—

	Rs.	a.	p.
(a) Extr office charges	27,979	9	2
(b) Superintendent of Land Records	2,062	8	1
(c) Experimental cultivation	43	1	0
(d) Veterinary charges	241	7	
(e) Rain-gauges	231	12	2
(f) Economic collection	126	0	8
	29,965	3	1

† This includes—

	Rs.	a.	p.
(a) Cost of Assam Valley Settlement Office	26,374	10	10
(b) " " Pratabgarh "	8,401	13	1
(c) " " Jaintia "	10,692	0	8
(d) Map tubes and racks	1,169	12	1
(e) Prisms	5,184	1	6‡
(f) Concrete blocks	996	11	6‡
	47,719	1	3

‡ This expenditure is recoverable from the settlement-holders.

The increase in the expenditure on the head office is partly due to the figure for 1891-92 being below the average on account of my absence on furlough and the fact that there was no Director for three months of the year, partly to the appointment of the Superintendent of Land Records being created, and partly to the raising of the pay of my Head Clerk.

I have the honour to be,

SIR,

Your most obedient Servant,

H. Z. DARRAH,

Director, Department of Land Records and Agriculture, Assam.

F

APPENDICES.

APPENDIX A.

Diary Statement of Sub-Deputy Collectors of the Assam Valley Districts for the year 1892-93.

Name of Sub-Deputy Collector.	District.	Subdivision.	Number of days in charge.	Number of days on tour.										Number of days without work.							Remarks.
				In cadastral mauzas.					In non-cadastral mauzas.												
				Running check lines.	Testing crops.	Examining mandals' papers.	Inquiries into cases.	Miscellaneous work, inspecting Circumlocution stations, &c.	Testing measurements.	Examining mandals' papers.	Inquiries into cases.	Miscellaneous work.	Total.	Number of days at office work.	Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half-pay.	Leave without pay.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Ratnadhar Barua	Golâghât ..	Dhuhri ..	180	....	....	....	....	....	12	2	9	66	89	52	18*	10	13	....	....	....	39	* 11 days in travelling to and from Jaintia.
Parbati Sankar Kar ..	Kâmrûp ..	Barpeta ..	172	43	1	....	29	24	5	4	2	15	114	33	21	8	1	....	....	....	26	
	Sibsâgar ..	Golâghât ..	193	....	....	1	4	3	....	....	....	....	8	79	1	14	17	74	....	....	106	
Masiat Ullah ..	Kâmrûp ..	Gauhâti ..	119	2	.. ..	14	....	9	....	1	....	....	26	81	3	2	....	....	....	....	5	
	Lakhimpur ..	Dibrugarh ..	253	....	.. ..	....	29	1	....	1	4	4	39	155	14	25	....	.. ..	.. ..	....	39	
Jageswar Barkataki ..	Darrang ..	Mangaldai ..	299	7	2	7	8	84	2	1	5	1	117	123	17	17	14	11	....	....	59	
	Lakhimpur ..	Dibrugarh ..	66	....	....	....	....	35	....	....	....	....	35	16	....	2	....	13	....	....	15	
Krishna Chandra Chaudhuri ..	Darrang ..	Tezpur ..	363	....	....	....	....	....	54	....	3	36	183	100	....	20	....	2	....	....	22	
Bholanath Das ..	Nowgong ..	Nowgong ..	198	9	....	4	12	40	....	....	....	....	62	101	6	14	2	....	....	....	22	
	Kâmrûp ..	Gauhâti ..	189	40	....	27	6	41	....	....	....	....	114	49	3	6	....	9	....	....	17	
Dilar Uddin Ahmed	Sibsâgar ..	Golâghât ..	172	20	2	15	10	44	19	6	....	1	108	42	18	3	....	4	....	....	22	
Lakshminath Kakati ..	..	Jorhât ..	304	3	....	4	16	17	19	7	....	1	67	110	4	14	9	....	....	....	27	
	Nowgong ..	Nowgong ..	161	74	3	20	1	25	. 2	....	....	....	125	36	....	....	....	....	....	....	....	
Phanidhar Chaliha	Sibsâgar ..	Sadr ..	363	22	2	15	28	45	8	2	13	12	154	187	....	24	....	....	....	....	24	
Chandra Kanta Sen	Kâmrûp ..	Gauhâti ..	81	....	....	....	....	....	....	....	....	....	....	48	....	....	3	....	....	....	3	
Jagat Bandhu Das	Sibsâgar ..	Jorhât ..	60	....	....	....	4	6	....	....	....	....	10	47	...	3	....	....	....	....	3	
Rajani Kanta Bardalai	Lakhim. Ar ..	North Lakhimpur	173	....	....	....	....	11	38	3	2	48	102	29	37†	9	....	....	....	....	46	† 30 days in travelling to and from Jaintia.
Radha Kanta Handiqui	Sibsâgar ..	Jorhât ..	101	3	....	.. ..	3	....	....	....	....	....	18	84	17	....	....	....	....	....	....	

APPENDIX B.

Diary Statement of Supervisor Kanungos for the year 1892-93.

Name of Supervisor Kanungo.	Name of Circle.	District.	Subdivision.	Number of days in charge.	Number of days on tour.										Number of days at office work.	Number of days without work.						Remarks.
					In cadastral mauzas.					In non-cadastral mauzas.												
					Running check lines.	Testing crops.	Examining mauzadár's papers.	Enquiring into cases.	Miscellaneous work, inspecting Subsidiary Settlement, &c.	Testing measurements.	Examining mauzadár's papers.	Enquiring into cases.	Miscellaneous work.	Total.		Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half pay.	Leave without pay.	Total.	
1	2	3	4	5.	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Nityananda	Beltola ..	Kámrúp ..	Gauháti ..	262	6	7	....	11	12	..	..	..	..	36	104	20	15	....	27	..	..	62	
Manirám Talukdár, Offg.	,, ..	,, ..	,, ..	163	28	17	....	6	50	..	..	1	..	102	53	6	2	....	..	..	..	8	
	Barigog ..	,, ..	,, ..	122	15	1	30	32	23	..	..	..	..	109	8	....	1	4	..	..	..	5	
Dhir Sing Deka	Tambulpur ..	,, ..	,, ..	365	107	68	9	2	16	13	..	..	..	220	98	7	8	4	28	..	..	47	
Kaliram Das	Boroma ..	,, ..	,, ..	365	113	14	10	20	51	..	..	..	..	208	104	16	8	7	22	..	..	53	
Ganga Ram Das	Palasbari ..	,, ..	,, ..	365	40	68	60	15	57	1	..	..	..	231	125	6	1	2	..	..	..	9	
Laghoocram	Mazo ..	,, ..	,, ..	365	45	48	31	36	49	..	..	..	..	209	136	10	4	6	..	..	..	20	
Radha Kiser	Nalbari ..	,, ..	,, ..	126	....	....	11	28	5	..	..	..	..	44	60	13	4	....	..	..	16	33	
Lalit Ram, Offg. ..	,, ..	,, ..	,, ..	128	6	21	....	20	1	..	..	..	..	48	47	26	3	4	..	..	..	33	
Lakshmi Kanta Bora ..	,, ..	,, ..	,, ..	101	3	2	11	19	2	..	..	..	..	37	31	14	....	19	..	..	..	33	
Konnath	Panduri ..	,, ..	,, ..	366	94	63	17	27	....	..	..	..	..	201	147	7	10	....	..	..	..	17	
Kwuda Baksh	Barigog ..	,, ..	,, ..	92	10	....	....	2	8	..	..	..	..	20	27	4	....	....	41	..	..	45	
Jagannath, Offg. ..	,, ..	,, ..	,, ..	141	80	6	7	....	12	..	..	..	..	105	43	....	....	3	..	..	..	3	
	Patidarrang ..	,, ..	,, ..	147	1	16	44	11	27	13	4	..	7	123	14	10	....	....	..	..	..	10	
Jinaram	Boko ..	,, ..	,, ..	267	15	20	47	3	2	..	2	1	7	97	106	18	....	21	18	..	..	54	Circle formed during the year. The supervisor Kanungo was ill and has died since.
	Patidarrang ..	,, ..	,, ..	64	....	....	....	....	....	..	..	..	..	....	....	....	....	....	..	..	..	....	
Moian Chandra Bora ..	,, ..	,, ..	,, ..	156	15	17	16	15	8	44	2*	3	10	125	23	4	....	2	..	..	..	6	
Kaliram, Offg.	Boko ..	,, ..	,, ..	44	18	....	13	....	7	..	..	..	..	38	2	4	....	....	..	..	..	4	Circle formed 22rd May 1892.
Jiu Ram	Barkhetri ..	,, ..	,, ..	313	44	31	25	2	68	..	1	..	..	171	118	....	....	....	24	..	..	24	
Bhagirath Das	Roha ..	,, ..	Barpeta ..	365	129	7	....	19	42	10	..	1	10	228	101	16	1	25	..	..	..	26	
Mina Ram Das	Bajali ..	,, ..	,, ..	365	147	12	20	4	15	..	..	..	..	198	118	10	10	6	25	..	..	49	
Easir Ali	Barpeta ..	,, ..	,, ..	331	63	14	....	7	43	..	..	..	..	127	166	7	11	....	..	..	..	18	
Chandra Kanta Barua	1st Circle ..	Darrang ..	Mangaldai ..	365	48	3	48	58	18	..	..	..	..	175	159	18	22*	8	..	..	..	51	Circle formed during the year. * Includes 17 days without work on account of rain.

Dayaram Das, Offg.	..	Circle No. II	..	,,	..	,,	..	85	....	....	....	1	28	..	..	..	..	29	37	10	3†	5	1	..	..	15	† Without work on account of rain.
Mohan Chandra Das	..	..	..	,,	..	,,	..	40	1	....	....	3	9	..	..	..	..	13	17	5	2‡	3	..	..	..	10	‡ Ditto.
Jaigopal Saharia	..	..	..	,,	..	,,	..	249	9	5	5	5	62	..	..	..	..	86	92	54	2§	5	..	..	..	62	§ 1 day ditto.
Basir Ali Biswas	..	..	Circle No. III	..	,,	..	,,	34	12	....	3	....	4	..	..	..	..	19	8	4	3‖	....	....	..	..	7	‖ Ditto ditto.
Bookaram Hazarika	..	..	,,	..	,,	..	,,	161	3	....	43	13	28	..	..	..	..	86	54	9	2¶	2	7	..	..	21	¶ 2 days ditto.
Nepal Chandra Das, Offg.	..	..	,,	..	,,	..	,,	39	17	4	3	1	12	..	..	..	..	37	5	17	....	....	....	..	..	17	
Rammal Das	..	..	,,	..	,,	..	,,	84	6	5	5	2	32	..	..	..	..	50	16	17	1**	2	..	..	..	20	** Without work on account of rain.
Ram Rath Dutt	..	..	Slighat	..	Nowgong	..	Nowgong	265	66	15	21	16	94	..	..	..	..	212	96	2	15	24	16	..	..	57	
Rakicharan Das	..	..	Town	..	,,	..	,,	317	29	8	13	26	84	..	..	..	..	160	123	7	16	7	2	..	..	24	
Lakhiram Das	..	..	,,	..	,,	..	,,	48	1	....	....	....	26	..	..	..	..	27	11	....	....	....	....	..	..	....	
		..	Ghagua	..	,,	..	,,	317	71	8	17	6	57	..	..	..	..	159	124	6	16	....	12	..	..	34	
Joy Ram Das	..	..	Roha	..	,,	..	,,	27	....	....	....	....	6	..	..	..	..	6	13	6	2	....	..	..	..	8	
		..	Doboka	..	,,	..	,,	115	45	4	10	....	21	5	1	..	4	91	16	4	4	....	..	..	..	8	
Ananda Ram Gogoi	..	..	Roha	..	,,	..	,,	27	....	....	....	2	9	..	..	..	..	11	....	....	....	....	..	..	..	....	
Sivanath Sarma	..	..	,,	..	,,	..	,,	278	36	11	2	24	71	..	2	..	..	146	108	6	19	2	..	..	..	27	
Jamna Chandra Bora, Offg.	..	..	,,	..	,,	..	,,	23	....	....	....	2	8	..	..	..	..	10	8	2	2	....	1	..	..	5	
		..	Myang	..	,,	..	,,	83	9	3	5	....	24	..	..	..	..	41	16	20	....	6	..	..	..	26	
Gunanath Deka	..	..	Dhing	..	,,	..	,,	207	55	16	10	1	67	..	..	..	..	149	24	6	15	....	3	..	..	24	Gunanath was transferred from Kamrup from 1st April, but before joining he loitered at home for some days.
		..	Myang	..	,,	..	,,	123	1	....	....	53	1	..	..	..	..	60	56	....	7	....	..	..	..	7	
Gadadhar Das, Offg.	..	..	Doboka	..	,,	..	,,	47	4	3	....	2	21	..	..	..	..	30	8	5	4	....	..	..	..	9	
Govindo Ram Dutt	..	..	Gerua	..	,,	..	,,	317	66	9	18	2	66	..	1	..	..	157	119	10	16	....	5	..	..	41	
Shahabuddin, Offg.	..	..	Myang	..	,,	..	,,	40	6	....	3	1	2	..	..	..	..	11	20	6	....	3	..	..	..	9	
Rammal Das, Offg.	..	..	,,	..	,,	..	,,	18	12	....	....	....	1	..	..	..	..	13	....	5	....	....	..	..	..	5	
Dina Nath Sarma	..	..	,,	..	,,	..	,,	66	....	....	....	....	....	..	..	..	..	....	51	....	15	....	..	..	..	15	Shibiaram, the permanent incumbent of the post, is on sick leave without pay.
Maheswar Das	..	..	Northern Circle.	..	Sibsagar	..	Golaghat	363	103	7	....	29	84	..	..	..	..	196	102	....	16	22	..	..	20	68	
Pranam Mohunta	..	..	Southern ,,	..	,,	..	,,	363	132	21	17	23	13	..	..	..	..	203	91	17	20	2	23	..	..	61	
Munshi Meher Uddin Bora	..	..	Central ,,	..	,,	..	Sadr	353	8	8	42	40	40	..	..	..	73	311	126	17	11	....	..	..	..	28	
Sibram Bora	..	..	Eastern ,,	..	,,	..	,,	226	14	19	24	20	49	..	..	..	36	162	126	23	18	7	..	..	..	28	
Lakshmi Kanta Das	..	..	Western ,,	..	,,	..	,,	289	23	18	27	84	5	..	..	..	45	204	112	17	20	....	..	6	..	42	
Shashidhar Kakoti, Offg.	..	..	,,	..	,,	..	,,	6	....	....	....	....	....	..	..	..	6	6	....	....	....	....	..	..	..	....	
Tita Ram Gogo	..	..	Eastern ,,	..	,,	..	,,	39	2	....	....	....	12	..	..	..	..	14	18	3	4	....	..	..	..	7	
		..	Doboka	..	Nowgong	..	Nowgong	136	5	....	3	2	5	..	..	..	..	16	91	7	24	9	16	..	..	49	
Nanda Kumar Saha	..	..	,,	..	Sibsagar	..	Jorhat	363	24	11	39	49	16	16	..	..	79	220	122	....	7	....	6	..	..	13	
Durga Ram Dutt	..	..	North-Western Circle.	..	,,	..	,,	395	18	7	....	61	60	9	..	..	64	216	100	....	13	9	..	27	..	49	
Krishna Das	..	..	South-Western Circle.	..	,,	..	,,	46	....	....	....	2	19	4	..	..	..	19	16	10	1	....	..	..	..	11	
Dandpati Das	..	..	South-Western Circle.	..	,,	..	,,	319	20	4	....	48	44	..	..	..	..	116	168	21	11	3	..	..	..	36	

APPENDIX C.

Work Statement of District and Subdivisional Officers for the year 1892-93.

Name of officer.	District.	Subdivision.	Area cadastrally surveyed.															Area not cadastrally surveyed.									
			Number of supervising kanungos whose work was inspected.	Number of villages tested.	Number of mandals.			Testing by check lines.						Testing without check lines.				Number of mandals.								Area found wrongly classified.	
					Total number.	Whose papers examined.	Whose field-work tested.	Number of lines.	Number of stations.	Number of offsets.	Length of lines in miles.	Area of fluctuating cultivation in jurisdiction, in acres.	Number of lines miles per square mile of fluctuating cultivation.	Number of fields tested.	Area, including jungle, in acres.	Number of villages.	Total number.	Whose papers examined.	Whose field-work tested.	Total area as shown by mauzadars.	Total area as shown by re-measurement.	Percentage of error.	Area of concealed cultivation discovered.	Basis shown as			
																									Right.	*Wrong.*	*Right shown as wrong.*
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
																				Acres.	Acres.					
Babu Harish Chandra Chaki, Subdivisional Officer.	Kámrúp	Barpeta	2	2	49	1	2	2	20	31	0·91	18,688	0·03	..	..	5	29	5	5	68	68	4·41	..	..	..	..
H. E. Hanson, Esq., Subdivisional Officer	Darrang	Mangaldai	..	2	64	..	2	4	26	57	0·79	5,189	0·10	..	..	..	19	..	..	..	..	....	..	..	..	..
Babu Akhaya Kumar Chatterji, Extra-Assistant Commissioner.	"	"	1	2	64	..	1	2	13	8	0·58	5,189	0·07	6	12	3	19	..	3	100	100	....	..	..	..	..
Lieutenant C. G. M. Kennedy, Deputy Commissioner.	Nowgong	Nowgong	2	14	144	4	12	29	262	308	9·49	44,041	0·14	..	..	4	17	..	4	260	261	·38	..	..	..	..
Lieutenant P. R. T. Gurdon, Subdivisional Officer,	Sibságar	Jorhát	1	1	86	..	1	4	3	24	0·42	3,129	0·09	22	18	..	18	..	..	..	..	....	..	..	..	..
F. J. Monahan, Esq., Deputy Commissioner	"	Sadr	2	7	59	12	4	4	29	48	1·06	4,464	0·15	..	..	2	7	2	2	8	7	12·50	..	..	..	..
B. V. Nichol, Esq., Assistant Commissioner	Lakhimpur	North Lakhimpur	..	..	..	..	..	..	..	..	....	....	....	..	..	2	30	..	1	8	10	25·00	..	..	..	..
W. S. Brown, Esq., Subdivisional Officer	"	"	..	..	..	..	..	..	..	..	....	....	....	..	..	1	30	..	1	7	5	28·57	..	..	..	..
		Total	5	28	372	17	22	45	353	473	13·23	80,697	0·16	28	30	17	141	7	16	451	449	0·66	..	..	..	..

APPENDIX D.

Work Statement of Sub-Deputy Collectors for the year 1892-93.

Name of Sub-Deputy Collector.	District.	Subdivision.	Area cadastrally surveyed.												Area not cadastrally surveyed.								Area found wrong by classified.		
			Number of villages tested.	Number of mandels.			Testing by check lines.						Testing without check lines.		Number of villages.	Number of mandels.			Total area as shown in mandelas.	Total area as shown by re-measurement.	Percentage of error.	Area of unsurveyed cultivation now surveyed.	Rupit shown as	
				Total number.	Whose papers examined.	Whose field-work tested.	Number of lines.	Number of points.	Number of spots.	Length of lines in miles.	Area of discarding cultivation or jurisdiction in acres.	Number of miles of cultivation or jurisdiction of doubtful position.	Number of fields tested.	Area, including jungly, in acres.		Total number.	Whose papers examined.	Whose field-work tested.					Rupit.	Parupati.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
																			Acres.	Acres.		Acres.	Acres.	Acres.	Acres.
Ratnadhar Barua	Golāghāt	Dhubri	..	..	..	..	..	....	....	....	....	....	..	....	6	30	5	5	200	342	12·24	..	..	19	24
Parbati Sanker Kar	Kāmrūp	Barpeta	51	49	33	45	162	1,006	766	38·18	18,685	1·14	..	....	5	29	5	5	218	225	7·80	..	..	..	..
	„	Gauhati	2	181	53	2	11	84	54	2·66	40,094	0·20	..	....	..	40	..	..	....	....	....	..	..	..	..
Mursiat Ullah	Lakhimpur ..	Dibrugarh.. ..	..	..	..	..	..	....	....	....	....	..	..	....	..	68	..	..	....	....	....	..	..	..	..
Dhotanath Das	Kāmrūp	Gauhati	53	191	118	48	61	569	341	27·26	4,0·4	4·06	241	218	..	40	..	..	....	....	....	..	..	..	..
	Nowgong	Nowgong	6	144	39	6	11	74	96	4·22	44,041	0·08	..	....	..	17	..	..	....	....	....	..	..	..	..
Jageswar Barkataki	Darrang	Mangaldai.. ..	10	64	22	7	16	114	283	4·43	5,153	0·	..	....	1	19	4	1	68	66	1·54	..	..	..	..
Krishna Chandra Chaudhuri ..	„	Tezpur	..	..	..	..	..	....	....	....	....	....	..	....	27	60	60	15	609	638	7·05	6	..	1	..
Lakshminath Kakati	Nowgong	Nowgong	99	144	144	93	268	1,674	1,609	69·05	44,011	0·87	119	175	2	17	..	2	39	44	12·82	1	..	..	..
	Sibsāgar	Jorhāt	8	56	7	2	17	23	30	1·15	3,129	0·37	..	....	24	18	..	13	271	303	11·81	..	..	74	20
Didar Uddin Bora	„	Golāghāt	13	44	39	14	24	82	46	6·93	2,889	1·92	11	6	8	11	2	5	160	213	33·24	33	..	..	..
Radha Kanta Handique	„	Jorhat	3	56	8	3	2	12	10	0·43	3,129	0·13	..	....	..	18	..	..	....	....	....	..	..	..	..
Thanidhar Chutiya	„	Sadr	46	89	55	35	63	211	248	20·89	4,464	2·87	250	662	6	7	7	4	106	119	12·32	..	1	12	16
Rajani Kanta Bardaloi	Lakhimpur ..	North Lakhimpur ..	..	..	..	..	..	....	....	....	....	....	..	....	20	30	..	4	454	492	8·37	3	2	1	27
		Total ..	285	607	495	277	677	3,2·3	3,931	182·20	118,601	0·88	956	1,051	80	335	32	29	2,222	2,471	11·15	43	3	28	87

APPENDIX E.

Work Statement of Supervisor Kanungos for the year 1892-93.

Name of supervisor kanungo.	Circle.	District.	Subdivision.	Area cadastrally surveyed.												
				Number of villages.	Number of mauzas.			Testing by check lines.							Testing without check lines.	
					Total number.	Whose papers examined.	Whose field work tested.	Number of lines.	Number of stations.	Number of offsets.	Length of lines in miles.	Area of fluctuating, cultivated, in jurisdiction, in ———	Number of lineal miles per square mile of fluctuating cultivation.		Number of fields tested.	Area, including jungle, in acres.
1	2	3	4	5	6	7	8	9	10	11	12	13	14		15	16
Bhaghirath Deka ...	Roha	Kámrúp ...	Barpeta ...	93	13	3	13	283	2,048	2,613	87·69	6,429	8·73		2,311	5,721
Minaram Das ...	Bajali	,, ...	,, ...	143	20	20	20	213	1,573	2,479	73·52	5,657	8·32		3,722	4,798
Enser Ali	Barpeta ...	,, ...	,, ...	63	16	11	16	172	979	1,351	41·65	6,599	4·04		1,024	2,881
Nityananda Das ...	Beltola ...	,, ...	Gauháti ...	12	7	7	7	16	39	62	1·04	1,063	6·00		116	1,037
Manuram Das ...	,, ...	,, ...	,, ...	.....		7	7	35	172	336	8·93				1,910	2,738
Gangaram Das ...	Palasbari ...	,, ...	,, ...	89	30	30	30	104	530	701	29·59	6,349	2·98		3,967	5,912
Jinaram Borah ...	Boko ...	,, ...	,, ...	28	22	22	19	33	171	138	8·54	8,868	1·74		428	2,832
Katiram Das ...	,, ...	,, ...	,, ...	27		11	17	47	357	441	15·56				.....	.....
Laghnuram Das ...	Hajo ...	,, ...	,, ...	161	20	20	20	76	1,168	1,298	41·17	4,819	5·47		6,104	6,469
Jewram ...	Barakhetri ...	,, ...	,, ...	96	16	16	16	67	827	1,220	25·66	8,437	1·95		2,870	6,332
Jinaram Borah ...	Patidarrang ...	,, ...	,, ...	21	19	19	15	27	180	146	8·35	1,906	6·57		17	132
Jagannath ...	,, ...	,, ...	,, ...	45		.....	14	3	10	16	0·67				50	3,886
Molan Chandra ...	,, ...	,, ...	,, ...	59		19	19	161	258	365	31·76				3,550	2,698
Radha Kisor Chaudhuri ...	Nalbari ...	,, ...	,, ...	.....	20	11	.....	.....	.....	.....	.....	1,315	1·81		.....	.....
Lalitram Chaudhuri ...	,, ...	,, ...	,, ...	14		.....	12	8	64	71	2·14				966	643
Lakshmi Kanta Borah ...	,, ...	,, ...	,, ...	4		15	7	6	53	71	1·58				24	92
Dhirsingh	Tambulpur ...	,, ...	,, ...	116	14	14	14	305	1,037	1,909	82·68	2,442	21·70		5,473	5,405
Konnath	Panduri ...	,, ...	,, ...	190	12	12	12	100	390	1,455	23·71	987	21·69		2,048	4,561

Maniram Das ...	Barigog ...	,, ...	,, ...	8		14	6	13	46	101	3·21			109	98
Khôda Baksh	,, ...	,, ...	,, ...	.....	14	4	3	.....	.....	.....	.....	1,450	13·99	970	475
Jagannath	,, ...	,, ...	,, ...			14	14	101	1,220	1,526	28·42			10,251	9,262
Kalamani	Boroma ...	,, ...	,, ...	152	17	17	17	147	1,073	1,373	55·55	3,268	10·89	3,260	3,489
Chandra Kanta Sarkar ...	Circle No. I ...	Darrang ...	Mangaldai ...	62	26	26	26	144	822	1,621	36·32	1,740	13·35	250	162
Dayaram Das, Offg.	Circle No. II ...	,, ...	,, ...	.....	19	13	13	.....	.....	.....	.....	1,756	.....	.....	.....
Joggoram Saharia ...	,, ...	,, ...	,, ...	.....	19	19	19	35	151	202	7·24	1,756	2·70	.....	.....
Mohan Chandra Das ...	,, ...	,, ...	,, ...	.....	19	10	7	2	11	25	0·36	1,756	0·13	.....	.....
Raman al Das ...	Circle No. III ...	,, ...	,, ...	.....	19	6	6	12	102	82	6·02	1,693	2·30	.....	.....
Basir Ali Biswas ...	,, ...	,, ...	,, ...	.....	19	4	7	25	80	139	5·89	1,693	2·21	.....	.....
Bhakatram Hazarika ...	,, ...	,, ...	,, ...	.....	19	19	2	3	16	29	0·61	1,693	0·23	.....	.....
Nepal Chandra Das ...	,, ...	,, ...	,, ...	.....	19	7	12	37	153	255	7·96	1,693	3·03	.....	.....
Rabicharan	Town Circle No. II..	Nowgong ...	Nowgong ...	31	31	31	28	39	333	751	16·21	5,424	1·96	956	1,951
Ramrath	Silghat, No. I ...	,, ...	,, ...	58	19	19	19	78	668	860	29·14	2,092	8·91	1,120	1,479
Lakshmiram Das ...	Ghugua, No. VII ...	,, ...	,, ...	85	17	17	17	125	833	1,465	40·88	7,428	3·52	992	1,187
Govindaram Dutt ...	Gerua, No. VI ...	,, ...	,, ...	87	12	12	12	83	732	1,051	35·84	9,426	2·43	1,706	5,141
Titaram Gogoi ...	Doboka, No. III ...	,, ...	,, ...	3		3	3	6	45	50	1·85			20	21
Gadadhar, Offg. ...	,, ...	,, ...	,, ...	3	16	2	1	7	20	22	0·56	2,319	7·05	150	100
Joyram Das ...	,, ...	,, ...	,, ...	40		16	16	65	472	803	23·11			468	450
Gunarath Deka ...	Dhing, No. V ...	,, ...	,, ...	115	20	20	20	126	1,171	2,114	54·74	7,697	4·55	2,626	2,736
Sivanath Sarma ...	Roha, No. IV ...	,, ...	,, ...	32	20	20	18	73	638	1,142	31·72	6,050	3·35	231	572
Sheik Shahabuddin ...	Myang, No. VIII ...	,, ...	,, ...	3	9	9	2	3	23	41	1·41	3,615	·25	.....	.....
Maheswar Das ...	Northern Circle...	Sibsâgar ...	Golâghât ...	53	22	22	22	130	467	435	53·48	1,887	18·13	3,754	3,789
Punaram Mohunta ...	Southern ,, ...	,, ...	,, ...	70	22	22	22	230	318	482	42·72	1,002	27·38	4,061	6,489
Nanda Kumar Nahs ...	Eastern ,, ...	,, ...	Jorhât ...	24	18	18	15	42	217	264	8·76	1,101	5·09	108	59
Dandpati Das ...	South-West ,, ...	,, ...	,, ...	28	17	17	17	31	157	258	5·89	1,126	3·35	100	32
Durgaram Dutt ...	North-West ,, ...	,, ...	,, ...	36	21	21	21	39	144	224	9·81	902	7·00	179	261
Meheruddin Bora ...	Central ,, ...	,, ...	Sadr ...	24	15	15	15	9	61	121	2·36	1,296	1·41	188	135
Lakshmi Kanta Das ...	Western ,, ...	,, ...	,, ...	13	27	27	24	28	230	197	9·72	1,314	4·74	24	12
Sibram Bora ...	Eastern ,, ...	,, ...	,, ...	29	17	17	17	20	135	288	6·99	1,854	2·42	594	339

APPENDIX F.

Work Statement of Tahsildars for the year 1892-93.

Name of tahsildar.	Name of tahsil.	District.	Subdivision.	Area cadastrally surveyed.											Area not cadastrally surveyed.								
				Number of villages tested.	Number of mandals. Total number.	Number of mandals. Where papers examined, field-work tested.	Number of mandals. Where papers examined, field-work tested.	Testing by check lines. Number of lines in mandals.	Testing by check lines. Number of lines.	Testing by check lines. Number of offsets.	Testing by check lines. Length of lines in miles.	Testing by check lines. Area of diara surface in square miles.	Testing by check lines. Number of lines in square miles of cultivable cultivation.	Testing by check lines. Number of lines in square miles of cultivable cultivation.	Testing without check lines. Number of lines in square miles of cultivable cultivation.	Testing without check lines. Area, including jungle, in acres.	Number of villages tested.	Number of mandals. Total number.	Number of mandals. Where papers examined.	Number of mandals. Where field-work tested.	Total area as shown by mandals.	Total area as shown by revenue survey.	Percentage of error.	Area of revenue survey villages also tested.	Area found wrongly classified. Basti shown as Bagh.	Area found wrongly classified. Basti shown as Pasturage.	Area found wrongly classified. Bagh shown as own Pasturage.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
																				Acres.	Acres.		Acres	Acres.	Acres.	Acres.
Niharan Chandra Mukerji		Bijni	Goálpára	Dhubri													18	18		19	1,203	1,207	0·49	2			1
Keshav Chandra Singha		Roha	Rámrúp	Barpeta	30	11	11	55	272	291	17·39	4,610	2·42	616	3,970	11	4	4	4	1,428	1,421	0·49	10			1
Harreswar Das		Bajali	"	"	24	20	18	19	3	28	4·84	21·15	5,557	8·49	1,597	1,971	1	2	1	1	48	48					
Phanisath Phukan		Gauhati	"	Gauhati	11	7		5	8	21	75	1·91	1,963	1·09	570	630	18	12	9	9	1,143	1,128	0·70				
Govindaram Chaudhuri		Palashari	"	"	13	22	4	4	9	80	100	1·9	6,349	6·15	2, 71	2,426	7	1	1	1	1,814	2,002	10·56	134			
Kaliram Chaudhuri		Chhaygaigaon	"	"	7	8	1	6	8	125	71	4·41	1,823	1·57	125	314	51	7	7	7	1,061	1,061					
Parmananda Chaudhuri		Boko	"	"	10	22		6	27	179	142	11·1	8,868	1·13	156	188		10									
Banga Chandra Chaudhuri		"	"	"	16		4	5	5	34	15	1·26		6·03	837	774	7		3	3	167	167					
Udaya Chandra Barua		Hajo	"	"	48	86	34	34	73	1,235	1,844	20·85	4,819	3·41	1,46	2,0·0		1									
Prithiram Chaudhuri		Patidarrang	"	"	3		2	2	4	86	13	0·95		0·39													
Radhanath Barua (in charge)		"	"	"		19							1,176				7	2	2	2	268	273	1·80				
Gangaram Das		"	"	"	16		11	32	342	226	1··93			6·28	2,911	2,999											
Bansidhar Sarma		Nalbari	"	"	14	20	20	10	22	209	217	8·25	1,316	4·02	396	663											
Aburam Chaudhuri		Tamulpur	"	"	12		11	9	41	165	282	9·09		2·36	74	618											
Radhanath Barua (in charge)		"	"	"	7	14		6	18	71	114	4·15	2,112	1·29	190	6 4	7	7	3	3	471	481	2·76	1			17
Paramananda Chandhuri		"	"	"													2		3	3	61	70	9·37				
Radhanath Barua		Rangia	"	"	20	26	20	17	69	683	1,05·	22·31	2,437	5·85	82	801											
Chandram Chaudhuri		Boroma	"	"	42	17	17	17	28	515	918	24·81	3,208	4·06	442	3,152											
Dharsidhar Barua		Kalaigaon	Darrang	Mangaldai	44	24	6	14	19	1·4	19·	4·75	1,·00	1·63	382	745											
Purasram Dutt		Mangaldai	"	"	34	15		10	31	132	191	6·60	655	6·07	170	673	2	4		3	101	96	4·95				
Bhabani Charan Sarma		"	"	"	3	12		3	6	44	43	1·20	1,545	0·71			6	5		4	203	207	0·75				
Gangaram Das		"	"	"	7	12		7	26	212	242	7·66	1,845	3·26				3		4							
Rabi Chandra Sarma		Sadr Tahsil	"	Tezpur													32	19		14	2,487	2,661	6·5	1		1	
Rudra Nath Barua		Roha	Nowgong	Nowgong	6	20	3	3	11	82	126	3·23	6,849	0·34	99	102											
Chandra Kanta Barua		Samagari	"	"	4	13	18	3	3	26	48	1·85	1,449	0·82	17	21											
Santiram Hazarika		Nowgong	"	"	2	19	8	8	11	116	158	5·05	1,322	2·44	113	257											
Dandadhar Barua*		Golaghát	Sibságar	Golaghát																							
Bistgram Barua		Jorhát	"	Jorhát	3	1		1		22	2	0·86	615	1·83	3	27											
Damadhar Dutta Barua		Sadr	"	Sadr	2	23	2	2	2	23	28	0·45	662	0·43													

* not do any testing.

APPENDIX G.

Work Statement of Mauzadárs and Tahsil Muharrirs for the year 1892-93.

District.	Subdivision.	Total number of mauzadárs and muharrirs, &c., who did any testing.	Number of villages tested.	Area cadastrally surveyed.											Area not cadastrally surveyed.								Remarks.
				Number of mandals.		Testing by check lines.						Testing without check lines.			Number of mandals.			Area shown by mandals.	Area as shown by revenue-roll.	Percentage of error.	Area in acres of cesspool of cultivation discovered.	Area found wrongly classified.	
				Total number.	Who papers examined.	Whose field-work tested.	Number of lines.	Number of fields.	Number of offices.	Length of lines in miles.	Area of fluctuating cultivation, in acres.	Number of linear miles per square mile of fluctuating cultivation.	Number of fields.	Area, including parah, in acres.	Number of villages.	Total number.	Whose field-work tested.					*Basti* shown wrongly as	*Jarip* shown as *basti*.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
																			Acres.	Acres.		Acres.	Acres.	Acres.	Acres.	
Goálpára	Dhubri	..	6	..	..	..	..	..	..	....	....	.....	..	....	19	33	..	6	1,325	1,270	2·65	3	1	7	14	
	Goálpara	..	....	..	..	..	..	..	..	....	....	.....	..	....	..	..	..	..	....	....	..	....	..	..	....	Permanently settled.
Kámrúp	Barpeta	..	7	40	38	18	67	439	365	21·28	8,418	1·62	468	6,769	96	50	14	14	5,244	5,234	0·23	7	..	..	....	
	Gauhátí	..	1	..	..	..	..	..	..	....	....	.....	..	....	4	40	1	1	18	18	..	....	..	..	....	
Darrang	Mangaldái	..	16	82	24	10	21	105	641	9·04	33·19	5,826	5·55	594	4,661	45	19	..	13	672	662	1·63	....	..	..	....	
	Tezpur	..	....	..	..	..	..	..	..	..	....	....	.....	..	....	..	60	..	..	....	....	..	....	..	..	....	
Nowgong	Nowgong	..	23	94	105	24	64	118	1,533	2,573	25·88	28,395	1·22	1,435	2,279	78	17	..	..	2,133	2,145	0·56	1	..	..	....	
Sibságar	Golághát	..	10	28	22	15	15	83	180	212	6·33	1,755	1·24	168	642	33	11	..	10	620	653	3·05	3	..	..	....	
	Jorhát	..	8	15	16	7	11	119	112	84	2·99	581	3·29	68	101	10	18	..	3	165	176	6·66	....	..	..	....	
	Sadr	..	4	15	14	5	6	6	24	92	0·81	1,017	0·21	112	93	..	7	..	..	....	....	..	....	..	..	....	
Lakhimpur	North Lakhimpur	..	....	..	..	..	..	..	..	....	....	.....	..	....	42	30	..	13	1,664	1,932	20·40	39	2	3	29	By Sub-Deputy Collector's clerk and others.
	Dibrugarh	..	....	..	..	..	..	..	..	....	....	.....	..	....	97	68	..	22	2,658	3,426	27·35	100	1	250	60	By Government Surveyor, Revenue Peshkar, and others.

APPENDIX H.

Statement showing the area of each Supervisor Kanungo's Circle in the cadastrally-surveyed portions of the Assam Valley Districts. *

Subdivision.	Name of supervisor kanungo's circle.	Nikhiriyá.	Lakhiriyá.	Khiriyá cultivated.	Khiriyá waste.	Grants.	Total.	Remarks.
		Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	
Gauhátí ...	Beltola ...	1·00	0·12	18·99	38·96	1·10	60·17	
	Palashari ...	10·84	2·22	95·14	52·57	1·58	162·35	
	Boko ...	1·12	1·19	26·15	134·79	.....	163·25	
	Hajo ...	27·12	19·53	53·50	32·83	1·73	134·71	
	Barkhetri ...	3·41	0·49	29·37	46·46	.....	79·73	
	Barigog ...	24·60	1·19	36·72	39·49	.....	102·00	
	Panduri ...	24·06	2·84	37·28	26·02	0·71	91·51	
	Nalbari ..	23·49	1·41	80·22	12·09	0·72	117·73	
	Tambulpur ...	4·65	0·45	31·85	83·61	0·69	121·24	
	Barama ...	15·19	3·36	51·47	70·02	.....	140·04	
	Pavidarrang ...	39·41	10·44	52·95	24·95	.....	127·75	
	Total ...	175·49	43·24	515·64	561·79	6·52	1,299·68	
Barpeta ..	Bajali ...	21·61	0·71	57·63	43·28	.....	123·23	
	Barpeta ...	6·22	0·75	20·85	95·86	.....	123·68	
	Roha ..	0·84	0·20	31·27	119·99	.....	152·30*	* Includes 133·10 square miles of experimental survey.
	Total ...	28·67	1·66	109·75	259·13	.....	399·21	
	Total Kámrúp ...	204·16	44·90	623·39	820·92	6·52	1,699·89	
Mangaldai ..	Mangaldai ...	16·77	2·13	54·26	69·36	10·56	153·08	
	Kalaigaon ...	28·15	2·03	61·58	104·86	8·44	205·06	
	Sipajhar ...	4·45	0·60	58·67	73·56	0·32	137·60	
	Bengbari ...	.....	0·10	47·49	96·00	4·67	148·26	
	Total ...	49·37	4·86	222·00	343·78	23·99	644·00	
Tezpur ...	Eastern Circle ...	2·93	0·52	60·97	50·27	1·62	116·31	
	Western ,, ..	0·16	.....	15·99	80·64	.....	96·79	
	Total ...	3·09	0·52	76·96	130·91	1·62	213·10	
	Total Darrang ...	52·46	5·38	298·96	474·69	25·61	857·10	

* This statement does not include the 182·13 square miles surveyed in 1892-93 under extension of survey rules.

APPENDIX H—*continued.*

Statement showing the area of each Superintendent Kanungo's Circle in the cadastrally-surveyed portions of the Assam Valley Districts—continued.

Subdivision.	Name of superintendent kanungo's circle.	Nyabiraj.	Lakhiraj.	Khiraj cultivation.	Khiraj waste.	Grants.	Total.	Remarks.
		Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	
Nowgong	No. I. Town ...	1·78	0·70	99·35	63·62	1·54	166·99	
	„ II. Silghat ...	2·29	1·85	66·94	36·98	8·62	116·98	
	„ III. Doboka ...	0·12	0·25	42·69	59·16	10·08	112·30	
	„ IV. Roha ...	.....	0·01	60·26	88·33	1·72	150·32	
	„ V. Dhing ...	3·27	.....	47·01	97·57	0·52	148·37	
	„ VI. Gorua ...	.....	.....	20·44	92·31	.....	112·75	
	„ VII. Ghugua ...	0·12	0·21	35·03	70·43	.....	105·79	
	„ VIII. Myang	.....	.....	14·99	73·02	1·48	89·49	
	Total ...	7·58	3·02	386·71	581·42	24·25	1,002·99	
Golaghat ...	Northern Circle ...	0·75	0·61	82·22	51·19	20·37	155·14	
	Southern „ ...	0·36	1·31	80·77	47·14	14·80	144·38	
	Total ...	1·11	1·92	162·99	98·33	35·17	299·52	
Jorhat ...	Eastern Circle ...	0·65	0·10	71·84	49·72	24·09	146·37	
	North-West „ ...	1·02	8·65	89·67	37·37	37·34	174·05	
	South-West „ ...	2·31	4·51	63·58	50·52	42·61	163·53	
	Majuli „ ...	0·04	43·08	28·04	78·28	0·81	150·25	Surveyed in 1891-92.
	Total ...	4·02	56·34	253·13	215·89	104·76	634·14	
Sibsagar Sadr.	Eastern Circle ...	0·23	0·08	54·58	146·51	44·49	245·89	
	Central „ ...	0·48	0·04	51·93	52·66	15·12	120·23	
	Western „ ...	0·51	0·20	104·58	77·12	38·50	220·91	
	Total ...	1·22	0·32	211·09	276·29	98·11	587·03	
	Total Sibsagar ...	6·35	58·58	627·21	590·51	238·04	1,520·69	
North Lakhimpur.	North Lakhimpur ...	0·51	2·75	42·64	34·16	.....	80·06	
Dibrugarh	Circle No. I ...	0·23	0·99	41·42	24·35	29·25	96·24	
	„ „ II ...	1·14	.....	37·67	44·47	9·67	92·95	
	Total ...	1·37	0·99	79·09	68·82	38·92	189·19	
	Total Lakhimpur ...	1·88	3·74	121·73	102·98	38·92	269·25	

APPENDIX I.

Statement showing the condition of theodolite marks on 30th June 1892.

Subdivision.	Classification.	Total number.	Total number found in good order by mandals.	Total number found not in good order by mandals.		Total colum ns 4 and 5, or total in good order or with slight defect.	Total number not discovered by mandals.	Remarks.
				Repaired.	Not repaired.			
1	2	3	4	5	6	7	8	9
Kámrúp (Sadr)...	(*a*) Prisms	3,013	2,951	21	2	2,972	39	*The decrease as compared with the previous year is due partly to the fact that in 1891-92 the same station marks were in many cases counted by the mandals of adjoining circles, as I have shown before; and partly to the exclusion of marks on certain *bâdâng* and *sirjâbâng* areas for the present return.
	(*b*) Jungle mounds ...	1,3649	929	283	126	1,161	3	
	(*c*) *Semal* boughs ...	3,477†	2,850	.....	15	2,850	212	
	(*d*) Kanungo's *dhips* ...	1,130	650	415	65	1,065	...	
	Total	8,620	7,380	668	218	8,048	254	
Ditto (Barpeta)	(*a*) Prisms	264*	255	.....	...	255	9	† The increase over last year's figures is due to the inclusion in the present return of marks in the areas surveyed in 1890-91.
	(*b*) Jungle mounds ...	669	.....	17	464	17	188	
	(*c*) *Semal* boughs ...	1,290†	622	668	...	1,290	...	
	(*d*) Kanungo's *dhips* ..	167	92	61	14	153	...	
	Total	2,390	969	746	478	1,715	197	
Darrang (Mangaldai) ...	(*a*) Prisms	1,657	1,651	1	...	1,652	5	
	(*b*) Jungle mounds ...	77	77	.....	...	77	...	
	(*c*) *Semal* boughs ...	4,863	3,692	1,096	24	4,788	51	
	(*d*) Kanungo's *dhips* ...	96	43	42	11	85	...	
	(*e*) Brick prisms ...	25	25	.....	...	25	...	
	Total	6,818	5,588	1,139	35	6,727	56	
Nowgong ...	(*a*) Prisms	2,404‡	2,235	151	3	2,386	15	‡ The increase over last year's figures is due to more prisms put up during 1891-92 by demarcation kanungos.
	(*b*) Jungle mounds ...	63	24	36	3	60	...	
	(*c*) *Semal* boughs ...	11,642†	1,357	9,282	431	10,639	662	
	(*d*) Kanungo's *dhips* ...	227	127	78	15	205	7	
	Total	14,336	3,743	9,467	452	13,210	674	
Sibságar (Sadr) ..	(*a*) Prisms	847§	840	.....	...	840	7	§ The return for the year ending 30th June 1891 did not include the marks of the second party of survey (line of 1889-90).
	(*b*) Jungle mounds ...	302§	299	.....	...	299	...	
	(*c*) *Semal* boughs ...	9,175§	1,536	5,266	1,701	6,802	569	
	(*d*) Kanungo's *dhips* ...	4	4	.....	...	4	...	
	Total	10,325	2,779	5,266	1,701	8,045	576	
Ditto (Jorhát) ..	(*a*) Prisms	997§	997	.....	...	997	...	‖ The difference between this year's figures and those shown in last year's return is reported to be due to the fact, that in 1891-92 all the *semal* boughs with or without mounds were shown as in good order, whereas in the present return only those with mounds have been so shown.
	(*b*) Jungle mounds ...	.....	.....	.....	...	.....	...	
	(*c*) *Semal* boughs ...	8,144§	717	2,950	3,389	3,667	988	
	(*d*) Kanungo's *dhips* ...	156	156	.....	...	156	...	
	Total	9,297	1,870	2,950	3,389	4,820	988	
Ditto (Golághát)	(*a*) Prisms	487	487	.....	...	487	...	
	(*b*) Jungle mounds ...	281§	281	.....	...	281	...	
	(*c*) *Semal* boughs ...	4,187§	375‖	2,281	1,205	2,656	276	
	(*d*) Kanungo's *dhips* ...	26	26	.....	...	26	...	
	Total	4,981	1,169	2,281	1,205	3,450	276	
	(*a*) Total prisms ...	9,669	9,416	173	5	9,589	75	
	(*b*) Total jungle mounds	2,692	1,610	285	603	1,895	191	
	(*c*) Total *semal* boughs...	42,325	11,349	21,463	6,765	32,812	2,748	
	(*d*) Total kanungo's *dhips* ...	1,806	1,098	596	105	1,694	7	
	(*e*) Brick prisms ...	25	25	.....	...	25	...	
	Grand total ...	56,517	23,198	22,517	7,478	46,015	3,021	

APPENDIX J.

Statement of Rainfall Stations and Instruments.

District.	Number of stations on 31st March 1892.			Number abolished during the year 1892-93.	Number added during the year 1892-93.	Number of stations on 31st March 1893.			Number of Government instruments in the district on 31st March 1893.				Remarks.
	Government.	Private.	Total.			Government.	Private.	Total.	Symon's gauges.	Measuring glasses.	Spirit levels.	Sprith measuring glasses.	
Sylhet ...	5	6	11	...	...	5	6	11	11	22	...	...	
Cachar ...	3	5	8	...	2	3	7	10	10	20	4	4	The station Nemotha, which was abolished on the 14th March 1892, was reopened in August 1892. The new station added is Badarpur.
Gáro Hills ...	1	...	1	...	...	1	...	1	1	2	1	1	
Khási and Jaintia Hills ...	3	...	3	...	...	3	...	3	3	6	...	...	
Néga Hills ...	4	1	5	...	...	4	1	5	5	10	...	...	
Manipur ...	...	...	...	...	1	1	...	1	1	2	...	...	Reopened during the year under report.
Goálpára ...	4	1	5	...	...	4	1	5	5	10	...	...	The Dhubri station has an observatory, and is under the direct management of the Meteorological Reporter to the Government of India.
Kámrúp ...	10	5	15	...	1	11	5	16	16	32	...	...	The new station added is Tambalpur.
Darrang ...	3	8	11	...	1	3	9	12	12	24	4	...	The new station added is Attarikhát.
Nowgong ...	1	6	7	...	...	1	6	7	7	14	...	...	The rain-gauge at Palkai was transferred to Ruturi.
Sibságar ...	3	8	11	...	...	3	8	11	11	22	...	...	The Sibságar sadr station has an observatory, and is under the direct management of the Meteorological Reporter to the Government of India.
Lakhimpur ...	4	8	12	...	...	4	8	12	12	14	...	...	
Total	41	48	89	...	5	43	51	94	94	178	9	5	

N.B.—The stations of which the Registrars are private individuals are classed as private, though some of them are supplied with Government instruments.

ASSAM SECRETARIAT PRINTING OFFICE NO. 268 (REVENUE)—325—11-12-93.

Remarks on the Report of the Department of Land Records and Agriculture, Assam, for 1892-93.

It is requested that any reply, or future reference, to this communication may quote its number, distinguishing letter, and date.

No. {409 Agrl / 8970R.}

FROM

THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM,

TO

THE DIRECTOR OF THE DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM

Shillong, the 6th December 1893.

SIR,

I AM directed to communicate the following remarks of the Chief Commissioner upon Mr. Darrah's Report on the Operations of the Department of Land Records and Agriculture, Assam, during the year 1892-93.

2. *Paragraphs* 2 *and* 3.—The year under report, as pointed out in these paragraphs, was an unusually busy one. Besides his ordinary duties, the resettlement of the Jaintia parganas, of the Assam Valley, and of the town lands of Gauhati, Dibrugarh, Sibsagar, Jorhat, and Golaghat, as also the enquiries Mr. Darrah was called upon to make for the purpose of preparing his Note on the *Thakbast* Survey of Sylhet, imposed upon him and your office much additional work. The action which has been taken in connection with the two important resettlements of Jaintia and the Assam Valley has already been reported to the Government of India; final orders have also been passed by the Chief Commissioner on the resettlement of the town lands above mentioned. Mr. Darrah's Note on the *Thakbast* Survey is a valuable record for reference when the time comes for submitting to the Government of India proposals on the subject of the claims put forward by the zamindars of Sylhet to lands which, it is now known, were never included in the permanent settlement. These proposals the Chief Commissioner hopes to submit very shortly.

3. *Paragraphs* 4, 5, 13, 14, 18, *and* 19.—Referring to paragraph 5, the Chief Commissioner would prefer that in future you should deal with the subject of tours in the first section of the report. The fact that Sub-Deputy Collectors and supervisor kanungos are employed in work, when on tour, which may be more conveniently referred to under the section which deals with the organisation and maintenance of village records, need not, Mr. Ward thinks, prevent you from separating the subject of tours from that of the work done on tour by the officers referred to.

The Chief Commissioner observes that Mr. Darrah was five and a half months on tour, including fifteen days in the rains, during which period he was able to visit every district and subdivision in the Assam Valley with the exception of the district of Goalpara, where there is at present no inspection work for the Director. In this Valley he discussed with the district and subdivisional officers their proposals in connection with the re-assessment. He also spent a few days in the Surma Valley in order to discuss and settle with planters the boundaries of some of their grants and to arrange with the Jaintia Settlement Officer matters connected with the Jaintia resettlement. The Chief Commissioner is well satisfied with the amount of touring which Mr. Darrah performed during the past year, as well as with the work done by him in the course of his tours.

The statements given in paragraphs 13 and 14 show the amount of touring done respectively by Sub-Deputy Collectors and supervisor kanungos. These same paragraphs also discuss the work done by these two classes of officers and the qualification of each officer. Paragraphs 18 and 19 again refer to work done by these officers when on tour. As stated above, the Chief Commissioner thinks that it would be better in future reports to notice separately from their tours the work done by these officers while on tour. He also thinks that the qualifications of each officer need not be discussed in an annual report. It will be sufficient if you keep, for your own information, a confidential record of the character of each officer's work. It is also not necessary to discuss in detail the amount of work done by each officer. It will be sufficient if the Director remarks generally on (1) the amount of touring and (2) the amount and character of the work done during tours, and expresses his opinion as to whether the tours and the work done come up to the required standard, noticing any officers whom he may consider to be deserving of special commendation.

4. *Paragraph* 15 of the report gives the result of the inspections made by Mr. Darrah and Mr. O'Donel, the newly appointed Superintendent of Land Records, of the village papers in the cadastrally-surveyed area of the Assam Valley, which now covers nearly 4,600 square miles. Altogether every kanungo's work in this area was brought under inspection, and only 43 mandals, being 7·09 per cent. of the entire number, escaped inspection. The Chief Commissioner is well satisfied with this result, and has no doubt that as Mr. O'Donel gains further experience in this kind of work, the number of mandals whose village papers escape inspection will be reduced. In Mr. Darrah's detailed remarks giving the result of his inspection for each district, the Chief Commissioner notices that in many circles maps are not brought up-to date, and that the erection and inspection of mounds and the inspection of theodolite stations in jungle tracts are shirked. The Sibsagar district shows the worst results in this respect. The special attention of the Commissioner and of all district officers will be drawn to Mr. Darrah's remarks, and the necessity for punishing the mandals, who neglect the clear rules which have been laid down for their guidance in this matter, will be insisted upon.

5. *Paragraphs* 17 *to* 20 refer to the inspection work done by district and subdivisional officers, Sub-Deputy Collectors, supervisor kanungos, tahsildars, and mauzadars; but these paragraphs notice also the amount of test measurement work done by each of these different classes of officers. Paragraphs 21 and 22 again take up the subject of test measurement work. It would, the Chief Commissioner thinks, conduce to clearness if in future the inspection work and the test measurement work of officers were treated separately. Mr. Ward notices that little inspection or test measurement work was done by district and subdivisional officers. There was doubtless some excuse for this omission last year, as these officers were fully engaged in making local enquiries in connection with the re-assessment of the Assam Valley; but the Commissioner will be directed to see that during the present cold season and in future years district officers do not neglect this very important part of their duties.

6. *Paragraph* 23.—This paragraph notices the duties of the registrar kanungos and assistant registrar kanungos, who have, under recent orders, been appointed to each district and subdivision, and whose duties are now clearly defined. Hitherto the registrar kanungos attached to the headquarters of each district exercised little if any check over the papers sent in by the mandals, and performed such duties as were assigned to them without any clear conception of what those duties were or of their responsibilities. They are now required to check closely the mandals' papers relating to areas which have not yet been brought under cadastral survey; they are also responsible for preparing correctly revenue statements based on the mandals' papers for all areas, whether cadastrally-surveyed or not, and for submitting consolidated statements of mandal's diaries and laying them before the Deputy Commissioner and subdivisional officer. A closer supervision will thus be exercised in future over the work done by the mandals than has ever been exercised before.

7. *Paragraph* 26.—The Chief Commissioner notices with satisfaction the amount of extension survey work done by local agency in the districts of Kamrup, Nowgong, Darrang, and Sibsagar on what is known as the Barpeta experimental system. This system has now been fairly started and with excellent results. More than 21 square miles were surveyed in 1892 at a cost of little over Rs. 9 a square mile, and 188 square miles during 1893 at a cost of Rs. 10-8 per square mile. The annual revenue gain resulting from the survey of 1892 is Rs. 220, and from the work of the current year Rs. 9,500. These results are most satisfactory.

8. *Paragraphs 27 and* 28.—The action which Mr. Darrah reports in paragraph 27 that he had taken for the purpose of having the theodolite stations of the cadastral survey permanently preserved is approved by the Chief Commissioner. Mr. Ward attaches the very greatest importance to this work of preserving station marks. He is glad to find that Mr. Darrah is able to report that a large majority of the theodolite stations are now permanently marked, and will give little further trouble owing to the *semul* boughs having struck root. During the present season, therefore, attention should be directed mainly to those stations which were not brought under inspection in 1892-93.

I have the honour to be,

SIR,

Your most obedient Servant,

F. C. DAUKES,

Secretary to the Chief Commissioner of Assam.

MEMO. NO. $\left\{\frac{409A\text{-}77}{8977R.}\right\}$

Shillong, the 6th December 1893.

COPY, with a copy of the Report, forwarded to the Commissioner of the Assam Valley Districts for information and guidance, special attention being invited to the remarks made in the letter to the Director of the Department of Land Records and Agriculture.

By order of the Chief Commissioner of Assam,

F. C. DAUKES,

Secretary to the Chief Commissioner of Assam.

A. S. P. O. (Rev.) No 387—352—11-12-93.

ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

FOR THE YEAR

1893-94.

By E. A. GAIT, Esq., I.C.S.,

DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE.

SHILLONG:

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No. 3010.

FROM

THE DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

To

THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Shillong, the 30th June 1894.

SIR,

I HAVE the honour to submit the Eleventh Annual Report, giving an account of the operations of this Department for the year ending the 31st March 1894.

I have the honour to be,

SIR,

Your most obedient Servant,

E. A. GAIT,

Director, Department of Land Records and Agriculture, Assam.

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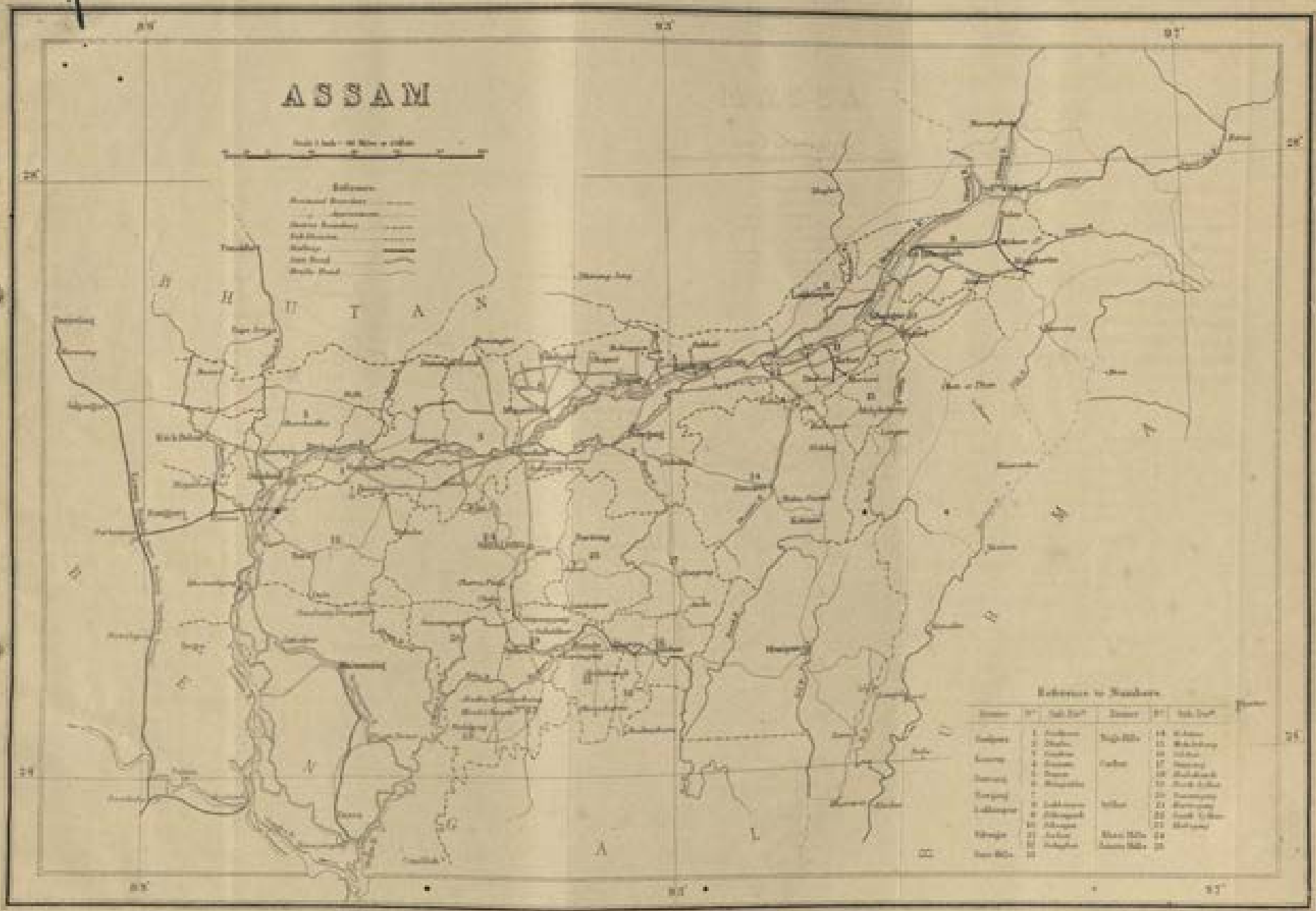
ASSAM
B H U T A N
Reference to Numbers

Annual Report of the Department of Land Records and Agriculture, Assam, for the year 1893-94.

Report writing.

The year was an unusually heavy one in the matter of report writing. In addition to the three annual reports of the Department, *viz.*,—

(1) the Departmental Report,
(2) the River-borne Trade Report,
(3) the Settlement Report,

the Provincial Land Revenue Report was drafted in my office as usual. This, moreover, was the year for the issue of the Triennial Foreign Trade Report of the Province. But the work which occupied most time was the Report on the Re-assessment of the Assam Valley Districts, which was submitted by Mr. Darrah to the Chief Commissioner with his letter No. 4600, dated the 3rd August 1893. As a supplement to the Re-assessment Report, Mr. Darrah prepared a Note on Agricultural Expenditure in the Assam Valley. Before leaving the Province, he drew up a Note on the work done by the Land Records Department in Assam, from the time of its creation in October 1882 to the close of the year 1892-93. During the cold weather, a Note was written on the subject of the brass and copper wares of the Province.

Director's tours.

2. At the beginning of the year, Mr. Darrah was on tour in the Nowgong district, whence he marched *viâ* Jowai to Shillong, where he arrived on the 13th April. Owing to re-assessment work, he was unable to leave his headquarters during the rains, but in September he attended the Agricultural Conference at Simla. I succeeded him as Director on the 4th November, and from that date to the 24th I was engaged in making myself acquainted with the different branches of my work, and in drafting the annual report on survey and settlement operations. On the 25th November, I left headquarters for a tour in Sylhet and Cachar. At Sylhet I inspected the Jaintia Settlement Office, and discussed with the Settlement Officer various questions which had arisen in connection with settlement procedure. During December I marched through each of the seventeen parganas in Jaintia, and made notes on the condition of large number of villages there, with a view to obtaining a personal knowledge of the condition of the people in different parts of the country. I also went to Silchar in the course of the same month and, after discussing with the Deputy Commissioner and Settlement Officer the arrangements to be made in connection with the cadastral survey of that district, I took the orders of the Chief Commissioner, who was in Silchar at the time, on such matters connected therewith as required his sanction. I visited the tahsils at Kánárghát, Kátigora, and Karimganj, and at the latter place made some enquiries into the working of settlement procedure in the Pratábgarh tahsil, which had just come under resettlement on the basis of the cadastral survey. On the 2nd January, I again reached Shillong, and, after spending a week there, proceeded to Gauháti. I began my tour in the Assam Valley by marching through the Mangaldai and Tezpur subdivisions, and then, crossing to the new ghát at Dhing, made a circuit of the Nowgong district, whence I marched along the Trunk Road to Golághát. From Golághát I marched to Jorhát, Silságar, and Dibrugarh. Thence I returned to the Májuli, and, after halting three days at Gorámur, proceeded to Tezpur to give evidence before the Hemp Drugs Commission. By this time it was the middle of March. The next four weeks were spent in touring through the sadr subdivision of Kámrúp and Barpeta. I got back to Gauháti on the 12th April, and, after halting there for a week to hold an examination of tahsildárs in practical surveying, returned to Shillong on the 20th of the same month. During my tour in the Assam Valley, I visited every subdivision and inspected the work of 35 out of 40 supervisor kánungos and of 619 out of 744 mandals employed in the cadastrally-surveyed area; the work of a few non-cadastral mandals was also examined by me. I inspected the two survey schools (at Gauháti and Dibrugarh), and the offices of eleven tahsildárs and of all sadr and subdivisional registrar kánungos. Altogether I was on tour for 120 out of the 147 days of the year during which I held the appointment of Director.

Superintendent of Land Records' tours.

3. At the beginning of the year, Mr. O'Donel, the Superintendent of Land Records, was on tour in the Sibságar district. He had to return to Tezpur somewhat earlier than had been arranged, in order to assist the Settlement Officer, Assam Valley Districts, in passing the boundaries of certain grants and *nisf-khirdj* and *lákhiráj* estates. On the 2nd May, the Superintendent went to Gauhátí to conduct the examination for first-class survey school certificates, and on the 5th he returned to Tezpur, where he remained until the 22nd July. He then started on a tour through Kámrúp, in the course of which he inspected all the kánungos' circles in the district, with the exception of the Roha circle in the Barpeta subdivision. On the 24th August he was again in Tezpur, where his assistance was once more required by the Settlement Officer, and he did not go into camp again until the 4th November, when he started for his cold-weather tour. He spent the first month inspecting the Darrang mandals and kánungos. From the 4th December to the 24th February 1894, he was engaged for a second time in inspecting the mandals' work in Kámrúp. He entered the Nowgong district on the 27th February, and did not complete his tour there until the 4th April. The work of the mandals in the Sibságar and Lakhimpur districts did not come under inspection by him until after the close of the year. I have arranged that in future the Superintendent of Land Records shall visit each subdivision at least once in the course of the year; his omission to do so during the year under review is of little moment, partly because he had inspected the work in Sibságar twice in the course of the previous year, and partly because I myself saw the papers of nearly all the mandals in the two districts which he failed to visit. Altogether, the Superintendent of Land Records was in camp for 239 days.

Sub-Deputy Collectors' tours.

4. The statement below shows briefly the touring done by the Sub-Deputy Collectors. Further details as to the manner in which their time was spent will be found in Appendix A:

Name of Sub-Deputy Collector.	Subdivision.	Number of days in charge.	Number of days on tour			Remarks.
			In cadastral mauzas.	In non-cadastral mauzas.	Total.	
Babu Jajnesvar Dás Gupta ...	Dhubri ...	163*	.....	30	30	* Excluding 78 days spent in the survey camp at Badarpur.
,, Bholá Nath Dás ...	Gauhátí ...	365	141	8	149	
,, Párbatí Sankar Kár ...	Barpeta ...	271†	129	.....	129	† Excluding 94 days spent in the survey camp at Badarpur.
,, Ratnadhar Barua ...	Dhubri ...	40	.....	6	6	
	Mangaldai ...	39	7	4	11	
,, Jogesvar Barkataki ...	Mangaldai ...	30	.....	.....	.....	
,, Harendra Kumár Ghose ...	Ditto ...	230	102	.....	102	
,, Krishna Chandra Chaudhuri	Tezpur ...	365	99	24	123	
,, Lakshmi Náth Kákati ...	Nowgong ...	365	158	1	159	
Munshi Didar Uddin Bora ...	Golághát ...	365	135	4	139	
Babu Rádha Kánta Handiqui ...	Jorhát ...	365	128	.....	128	
,, Phanidhar Chaliha ...	Sibságar Sadr.	365	126	8	134	
Munshi Massiat Ullah ...	Dibrugarh ...	365	80	77	157	
Babu Rajani Kánta Bardalai ...	North Lakhimpur ...	365	136	50	186	
,, Purna Chandra Mitra ...	Kárimganj ...	365	122	32	154	

Babu Jajnesvar Dás Gupta is a new Sub-Deputy Collector, appointed in August 1893. Excluding the 78 days he was at work in the survey camp at Badarpur, learning surveying, he was attached to the Dhubri subdivision for 163 days, during which period he spent only 30 days on tour.

Babu Ratnadhar Barua was attached to Dhubri for 40 days (from 1st April to 10th May 1893). He took charge at Mangaldai on the 19th May and worked for 34 days till the 21st June, on which date he went away on sick leave. He returned from leave on the 27th March 1894, and was in charge for the few remaining days of the year.

Babu Jogesvar Barkataki was attached to Mangaldai for 30 days only (from 1st to 30th April 1893), and did no touring.

Babu Harendra Kumár Ghose officiated as Sub-Deputy Collector at Mangaldai for 230 days (from the 9th August 1893 to 26th March 1894), and reverted to his substantive appointment as a clerk, when Babu Ratnadhar Barua returned from sick leave. Having regard to the number of days he was in charge, he was on tour for rather more than the minimum period prescribed.

Babu Párbati Sankar Kár was attached to the Barpeta subdivision for 271 days. For 94 days he was learning surveying at the survey camp at Badarpur. The time he was on tour bears just about the same proportion to the prescribed minimum for the year, as the portion of the year during which he was in charge bears to the whole year.

The remaining Sub-Deputy Collectors were attached throughout the year to the stations shown against their names. Four of them were on tour for upwards of 150 days, the longest time (186 days) being spent in camp by Babu Rajani Kánta Bardalai, of North Lakhimpur. Of the others, Babu Bholá Náth Dás, of Gauhátí, spent 149 days on tour, and thus almost reached the prescribed minimum. The extra work at headquarters involved by re-assessment operations is the plea generally urged by the Sub-Deputy Collectors whose tours fell short of the proper period.

Supervisor kánungos' tours.

5. The touring done by supervisor kánungos is shown in detail in Appendix B. Of the seventeen men who were in charge of a circle for the whole year, only seven exceeded the minimum touring period prescribed for this class of officers (200 days). Of those whose touring fell below this minimum, the worst offenders were Jairám, of Doboka (159 days), and Rabicharan, of the town circle (160 days) in Nowgong, Puárám of the southern circle in Golághát (160 days), and Sibrám of the eastern circle in Sibságar Sadr (162 days). Twenty-three supervisor kánungos were in charge of their circles for a portion of the year only; seven of these were on tour for a sufficient number of days, as compared with the period for which they held charge of their circles, but the others all toured less than they should have done. The deficiencies of those who were on tour for less than the prescribed period have been brought to the notice of the district officers concerned in my district inspection notes, and many of them have been punished in consequence. The tendency of almost all the supervisor kánungos is to avoid camping as much as possible, and they will never, as a body, do as much touring about as they should do, unless they are constantly watched by the district officers under whom they serve, and by the Sub-Deputy Collectors, whose special duty it is to look after them.

District.	Subdivision.	Name of circle.	Name of supervisor kánungo.	Number of days in charge.	Number of days on tour.	Remarks.
Kámrúp ...	Sadr ...	Beltola ...	Manurám Tálukdar ...	44	29	Transferred to Golághát.
,, ...	,, ...	,, ...	Dhanesvar, Offg. ...	173	41	
,, ...	,, ...	,, ...	Nityánanda ...	148	101	
,, ...	,, ...	Palásbari ...	Gangarám Dás ...	34	20	Transferred to Tezpur.
,, ...	,, ...	,, ...	Mantan Dás ...	331	185	
,, ...	,, ...	Boko ...	Káti Ráu, Offg. ...	156	86	
,, ...	,, ...	,, ...	Mághirám ...	209	134	
,, ...	,, ...	Pátidarrang ...	Molán Chandra Bora ...	365	233	
,, ...	,, ...	Hájo ...	Jiu Rám ...	88	78	
,, ...	,, ...	,, ...	Jajun Rám, Offg. ...	21	5	
,, ...	,, ...	,, ...	Laghnu Rám ...	256	124	
,, ...	,, ...	Barkhetri ...	Jiu Rám ...	256	82	
,, ...	,, ...	,, ...	Laghnu Rám ...	109	46	
,, ...	,, ...	Barigog ...	Jagannáth ...	70	61	Transferred to Lakhimpur.
,, ...	,, ...	,, ...	Titárám Dutt ...	260	50	
,, ...	,, ...	,, ...	Paturám, Offg. ...	45	22	
,, ...	,, ...	Panduri ...	Kannáth ...	355	151	
,, ...	,, ...	,, ...	Paturám, Offg. ...	30	...	
,, ...	,, ...	Nalbari ...	Lakshmi Kanta, Offg. ...	7	...	
,, ...	,, ...	,, ...	Bátirám, Offg. ...	52	29	
,, ...	,, ...	,, ...	Rangdeb Barua ...	306	136	
,, ...	,, ...	Tambulpur ...	Dhir Sing Deka ...	365	180	
,, ...	,, ...	Baroma ...	Kalámáni Das ...	72	44	Transferred to Mangaldai.

District.	Subdivision.	Name of circle.	Name of supervisor kánungo.	Number of days in charge.	Number of days on tour.	Remarks.
Kámrúp ...	Sadr ...	Baroma ...	Mádhab Rám Gagai ...	293	79	
,, ...	Barpeta ...	Bajali ...	Minárám Dás ...	35	31	Transferred to the Májuli.
,, ...	,, ...	,, ...	Sháhábuddin Ahmed ...	330	158	
,, ...	,, ...	Barpeta ...	Basir Ali ...	365	201	
,, ...	,, ...	Roha ...	Bhogirath Deka ...	365	212	
Darrang ...	Mangaldai ...	Mangaldai ...	Kalámáni Dás ...	203	83	
,, ...	,, ...	,, ...	Manirám Koot ...	33	78	
,, ...	,, ...	Kalaigaon ...	Jajnaráun Saharia ...	365	98	Papers containing the details of 183 days were burnt down in the fire which occurred at the Kalaigaon tahsil.
,, ...	,, ...	Sipajhar ...	Chandra Kanta Sirkar ...	365	261	
,, ...	,, ...	Bengbari ...	Rámmal Dás ...	346	181	
,, ...	Tezpur ...	Western ...	Durgárám Dás ...	319	136	
,, ...	,, ...	Eastern ...	Gangárám Dás ...	329	169	
Nowgong ...	Nowgong ...	Town ...	Rabi Charan Dás ...	365	160	
,, ...	,, ...	Silghát ...	Rámrath Dás ...	365	176	
,, ...	,, ...	Deboka ...	Jairám Dás ...	365	159	
,, ...	,, ...	Roha ...	Sibnáth Sarma ...	365	207	
,, ...	,, ...	Dhing ...	Gunarath Deka ...	365	172	
,, ...	,, ...	Gerua ...	Gobindrám Dutt ...	365	212	
,, ...	,, ...	Gluguas ...	Lakshmirám Dás ...	365	234	
,, ...	,, ...	Mayáng ...	Sháhábuddin, Offg. ...	25	...	
,, ...	,, ...	,, ...	Jagai Bora ,, ...	210	53	
,, ...	,, ...	,, ...	Titirám Gogai ...	130	100	
Sibságar ...	Golághát ...	Northern ...	Mohesvar Dás ...	57	49	Transferred to Dibrugarh.
,, ...	,, ...	...	Manu Rám Talukdar ...	310	94	
,, ...	,, ...	Southern ...	Puárám Mahanta ...	365	160	
,, ...	Jorhát ...	Eastern ...	Nanda Kumár Naha ...	242	27	
,, ...	,, ...	,, ...	Mahirám Dás (junior) ...	123	80	
,, ...	,, ...	Southern ...	Dánpati Dás ...	262	34	
,, ...	,, ...	,, ...	Kátirám Dás ...	103	46	
,, ...	,, ...	North-Western	Durgarám Dutt ...	46	42	
,, ...	,, ...	Majuli ...	Mahirám Dás (senior) ...	319	138	
,, ...	,, ...	,, ...	Minarám Dás ...	316	120	
,, ...	Sadr ...	Eastern ...	Shibrám Bora ...	365	163	
,, ...	,, ...	Central ...	Mihiruddin ...	365	191	
,, ...	,, ...	Western ...	Lakshmi Kánta Dás ...	42	38	
,, ...	,, ...	,, ...	Lalit Rám Chaudhuri ...	317	109	
Lakhimpur ...	North Lákhimpur.	North Lakhimpur.	Jagannáth Deka ...	286	184	
,, ...	Dibrugarh ...	Dibrugarh ...	Maheswar Dás ...	300	106	Transferred from Golághát.
,, ...	,, ...	Chabua ...	Lakshmi Kánta Dás ...	314	150	

Survey schools.

6. As in the preceding year, there were two survey schools, one at Gauhati and the other at Dibrugarh. The latter school was opened in August 1892, with a view to instruct the mandals of Lakhimpur in surveying before the papers of the area cadastrally surveyed in 1891-92 were handed over to their custody.

The following statement gives details as to the number of pupils passed by each school during the year, and the average cost per pupil :

Year.	Number of men who received first-class certificates.				Number of men who received second-class certificates.				Total passed.	Total cost of the school.	Total receipts.	Net cost.	Average net cost of each passed pupil.
	Tahsildárs.	Munsiffs.	Mandals.	Candidates	Total.	Munsiffs.	Mandals.	Candidates.	Total.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
											Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1892-93 .. { Gauháti ..	..	..	1	11	12	1	19	69	89	101	1,176 9 9	1,341 8 0	—165 7 3	—1 10 4
{ Dibrugarh ..	..	..	..	..	..	..	9	1	10	10	312 8 6	106 0 0	206 8 6	20 10 6
Total 1892-93 ..	..	..	1	11	12	1	28	70	99	111	1,487 9 3	1,447 8 0	40 1 3	0 5 10
1893-94 .. { Gauháti ..	..	..	..	7	7*	..	51	588	65	1,170 13 9	1,138 10 17	32 3 8	0 7 11
{ Dibrugarh ..	..	..	..	..	..	..	18	30‡	36	724 15 9	138 0 0	586 15 9	16 2 10
Total 1893-94 ..	..	..	..	7	7†	..	23	63	94	101	1,895 12 6	1,276 10 1	619 2 5	6 2 1

* Besides these, one outsider mandal and three outsider candidates passed.

† Besides these, two outsider candidates passed.

‡ Out of this Rs. 71-8 represent the sale proceeds of Mandals' Rules.

§ Besides these, five mandals and eleven candidates not taught in the school passed.

The Gauháti school did fairly well. The number of pupils passed was less than in the preceding year—a result which was partly due to the term examination having been rendered more difficult by the addition to the curriculum of the rules relating to the maintenance of settlement records in cadastrally-surveyed tracts. The expenditure includes a sum of Rs. 200 spent in repairing the school house. But for this, the school would have been more than self-supporting, as in the preceding year.

The Dibrugarh school passed 36 pupils against 10 in the preceding year. The net cost per passed pupil fell from Rs. 20-10-5 to Rs. 16-3-1. It is hoped that the results of the current year will show a further improvement.

During my cold-weather tour, I was much struck with the inefficiency of the mandals of Upper Assam, and with the entire absence of a reserve of passed candidates to fill vacancies due to deaths, resignations, and dismissals, such as is found in the districts lower down the valley. The establishment of a survey school at Dibrugarh is doing a good deal to improve the standard of efficiency in that district, but it is found almost impossible to induce men from Sibságar to attend the school, and it seems, therefore, very desirable that a school should be established at some central place in that district. There were formerly three survey schools, at Golághát, Jorhát, and Sibságar sadr, but they were closed in 1888, when the cadastral survey broke ground there, the reason being that actual work with the survey party afforded a far better training than any amount of instruction in a survey school could possibly do. Now, however, that the survey operations have closed, it seems necessary to re-open at least one of these schools, and arrangements are accordingly being made to start a survey school at Jorhát.

Examination for first-class survey certificates.

7. Two examinations for first-class survey certificates were held at Gauháti by the Superintendent of Land Records, one in December 1893 and the other in May 1894. Out of 46 men (mandals and candidates) who appeared in the two examinations, only 11 succeeded in passing, *viz.*, 10 candidates and one mandal. No tahsildár appeared at either examination; under the new rules it is no longer necessary for tahsildárs to pass the annual Survey School Examination.

Special Survey Examination for tahsildárs.

8. On the 13th to 19th April 1894 at Gauháti, I held an examination of tahsildárs in practical surveying as required by chapter V, section IV, Rule 7 of the Manual of Executive Rules. Four appeared, *viz.*, Babus Uday Chandra Baruá, Banga Chandra Chaudhuri, and Cheniram Dás, and Munshi Eunás Ali. Of these, the first two passed and have been given the usual certificates. Munshi Eunás Ali and Babu Cheniram Dás failed. Babu Nibáran Chandra Mukharji, tahsildár of Bijni, was examined by me at Hájo and Bhawánipur, and was found sufficiently qualified for a certificate, which I accordingly gave him. Babu Pradyumna Chárán Dás, tahsildár of Silchár, and Babu Haris Chandra Sen, tahsildár of Háilákándi, went through a course of practical training in the survey camp at Badarpur, and were given the usual certificates on the report of the

Superintendent of Survey. Babu Dandadhar Barua, tahsildár of the Golághát tahsil, who was examined by the Superintendent of Land Records, was not found to possess the requisite knowledge of practical surveying; he will be called upon to appear again next year. Babu Sántirám Házarika, of the Nowgong town tahsil, was to have been examined by the Superintendent of Land Records, but the Deputy Commissioner could not spare him for more than a day at the time when that officer was in Nowgong, and so the examination was postponed. Babus Sitánáth Saharia, Chandra Kánta Barua, Bistu Rám Barua, and Rudra Náth Barua were also liable to the examination, but represented that they had not had sufficient time to qualify themselves. Arrangements will be made to examine these Babus in the course of the current year. Altogether, out of 27 tahsildárs, 12 have now passed in practical surveying and 7 have been exempted.

Qualified subordinate officials.

9. The following statement gives details as to the number of qualified tahsildárs, mauzadárs, and mandals in Government employ in the Assam Valley districts, at the close of the year under report, as compared with the figures of the preceding year. Details as to the number of qualified candidates for employment are also given :

District.	Total number on 31st March 1894.			Number exempted on 31st March 1894.			Men with first-class certificates on 31st March.						Men with second-class certificates on 31st March.							
	Tahsildárs.	Mauzadárs.	Mandals.	Tahsildárs.	Mauzadárs.	Mandals.	Tahsildárs.		Mauzadárs.		Mandals.		Candidates.		Tahsildárs.		Mauzadárs.		Mandals.		Candidates.	
							1893.	1894.	1893.	1894.	1893.	1894.	1893.	1894.	1893.	1894.	1893.	1894.	1893.	1894.	1893.	1894.
Goálpára ..	1	8	26	..	6	..	..	..	..	..	1	1	..	..	..	..	2	.. (f)	16	7(e)	..	..
Kámrúp ..	12	8	800	2	..	17	7	7	3	2	37	26	31	25	1	..	1	3	261	266	252	144
Darrang ..	5	14	143	..	1	6	1	1	2(a)	1	11	15	1	1	1	1	5	5	121 (f)	110	31(f)	31
Nowgong ..	3	20	166	..	..	..	1	1	4	4	24	24	2	2	..	..	2	1(b)	119	123(c)	40	31(d)
Sibságar ..	3	31	205	1	7	.	..	..	2	2	32	33	1	3	1	1	22	21	85	100	5	5
Lakhimpur ..	..	37	108	..	..	..	..	..	1	3	6	4	1	1	..	..	1	2	18	42	5	13
Total ..	24	118	857	3	14	23	9	9	12	12	106	101	36	32	3	2	33	32	610	638	333	324

(a) The mandals who passed from the old Dhubri Survey School have been excluded ; hence the decrease.

(b) One mauzadár died during the year.

(c) Besides four new men were added during the year.

(d) Seven men were appointed to mandalships and two died.

(e) Two mauzadárs passed from the Dhubri Survey School not shown.

(f) Figures shown in report for 1892-93 were incorrect.

In this statement, men who worked as amíns with the cadastral survey party have been classed with the holders of first-class survey school certificates, and those who obtained the preliminary certificate given by the Superintendent of Survey to persons who have passed through the survey training class have been treated as possessing qualifications equal to those possessed by persons who have passed the second-class survey school examination. The Chief Commissioner has recently empowered me to grant second-class certificates to uncertificated mandals and candidates who have rendered approved service in extension survey and first-class certificates to men already possessing certificates of the second class to those who have proved themselves, by their work in extension survey, to be thoroughly competent surveyors.

The number of mandals in Kámrúp who have been exempted from examination in surveying has increased slightly during the past two years, instead of decreasing as it should have done. Rule 52 of the Survey School Rules provides that no unqualified person may be appointed to the post of mandal without the special sanction of the Deputy Commissioner. Sanction to such appointment has been given in 19 instances since the 1st April 1892, of which 12 are in the Sibságar district, where the number of qualified candidates is practically *nil*.

10. The following statement shows the number and grading of mandals in each district of the Assam Valley as it stood on the 1st April 1894, and compares the figures with those of the previous year, and with the sanctioned scale:

Grading of mandals.

Name of district.	Sanctioned scale.				Scale on the 1st April 1893				Scale on the 1st April 1894.				Increase or decrease during the year.			
	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Goálpára ...	7	10	18	35(*a*)	...	9	26	35	1	11	23	35	+1	+2	— 3	...
Kámrúp ...	59	88	148	295	17	96	182	295	17	99	179	295*	...	+3	— 3	...
Darrang ...	30	45	75	150	13	49	81	143	12	50	81	143	—1	+1	...	...
Nowgong ...	34	51	86	170	19	23	119	161	16	21	129	166	—3	—2	+10	+ 5(*b*)
Sibságar ...	40	62	103	205(*c*)	19	29	147	195	18	30	157	205	—1	+1	+10	+10(*d*)
Lakhimpur ...	24	36	60	120	6	15	77	98	4	18	86	108	—2	+3	+ 9	+10(*e*)
Total ...	194	292	489	975	74	221	632	927	68	229	655	952	—6	+8	+23	+25

* Exclusive of the five mandals of Beltola paid by the mauzadár.

(*a*) Revised scale sanctioned in Secretary to the Chief Commissioner's No. 106 Survey.—7949R., dated the 12th October 1893.

(*b*) Five new men were entertained during the year.

(*c*) Revised scale sanctioned in Secretary to the Chief Commissioner's No. 76 Survey.—4876, dated the 3rd July 1893, to Director of Land Records and Agriculture.

(*d*) These were for the Majuli mauzas

(*e*) The cadastral papers having been completed, the mandals' circles were revised, and the number of mandals increased during the year.

The variations in the strength of the mandals' establishment in each district have been explained in the foot-notes appended to the statement. The decrease in the number of first-grade men, as compared with the figures of the preceding year, is due partly to some of them having been appointed mauzadárs or supervisor kánungos, and partly to the small number of men qualified for promotion to the highest grade. The desirability of filling the sanctioned proportion of appointments in the higher grades has not been lost sight of, and during my tours I made a point of reporting to district officers the names of all men whose work seemed good enough to justify their promotion.

11. In the paragraphs below the headings prescribed by the Government of India, in Circular No. 54A., dated the 28th April 1884, have been separately taken up.

Prescribed headings.

I.—ORGANIZATION AND MAINTENANCE OF VILLAGE RECORDS.

Inspections by Director and Superintendent of Land Records.

12. The statement below shows the number of mandals and supervisor kánungos whose papers were examined by me and the Superintendent of Land Records :

District.	Subdivision.	Total number of supervisor kánungos in cadastrally-surveyed mauds.	Number of kánungos whose work inspected by		Total number of mandals in cadastrally-surveyed areas.	Number of mandals whose work inspected by		Remarks.
			Director of Land Records and Agriculture.	Superintendent of Land Records.		Director of Land Records and Agriculture.	Superintendent of Land Records.	
1	2	3	4	5	6	7	8	9
Kámrúp	Barpeta ...	3	3	3(a)	52	37	52(b)	(a) These include 2 inspected twice. (b) These include 37 visited twice. (c) All these were visited twice. (d) Visited at second inspection. The papers of 185 mandals were inspected at his first inspection.
,, ...	Gauháti ...	11	10	11(c)	198	124	187(d)	
Darrang	Mangaldai ...	4	4	4	77	76	65	
,, ...	Tezpur ...	2	2	2	29	29	14	
Nowgong	Nowgong ...	8	8	8	151	149	147	
Sibságar	Golághát ...	2	2	...	47(e)	43	...	(e) Exclusive of 6 mandals in Ahatguri.
,, ...	Jorhát ...	4	1	...	78(f)	75	...	(f) Inclusive of 6 mandals in Ahatguri.
,, ...	Sadr	3	3	...	66	45	...	
Lakhimpur	North Lakhimpur .	1	1	...	19	19	...	
,, ...	Dibrugarh ...	2	2	.	27	24	...	
	Total	40	39	28	744	619	465	

The work of 39 out of 40 supervisor kánungos and of 619 out of 744 mandals employed in the cadastrally-surveyed area was inspected by me. The Superintendent of Land Records inspected the work of 28 supervisor kánungos and 465 mandals. As explained in paragraph 3 above, the Superintendent paid no visit to the districts of Sibságar and Lakhimpur, but he made two inspections in Kámrúp, and thus saw twice over the papers of 13 kánungos and 222 mandals of that district. The work of the only supervisor kánungo whom I did not see was inspected by the Superintendent of Land Records, and so also was that of 81 out of the 125 mandals who did not appear before me. Consequently, none of the supervisor kánungos, and only 44 mandals escaped inspection altogether—a result which is, I think, satisfactory, especially when it is remembered that owing to the settlement on the results of the cadastral survey of the area surveyed in 1891-92, there were 7 supervisor kánungos and 134 mandals more to be inspected than there were in the previous year.

A brief account of the results of the inspections, as far as the condition of the village papers of each subdivision and district is concerned, is given below.

Kámrúp.—In this district there are, in the cadastrally-surveyed area, 14 kánungos and 250 mandals. Of these, the Superintendent of Land Records saw all the 14 kánungos and 239 mandals, and I inspected the papers of 13 kánungos and 161 mandals. The papers of 13 kánungos and 222 mandals were inspected twice by Mr. O'Donel. The work was found to be very backward everywhere, but this was chiefly owing to the fact that the decennial *jamábandis* had to be rewritten this year, and the revenue collected at the revised rates. Notwithstanding the efforts which have been made to put

a stop to it, the objectionable practice of inking in the old cultivation on the map, without first testing it on the ground, is still common in this as in most other districts. The mandals are also in the habit of starting their new survey from the corners of fields instead of from fixed points and of determining the position of new fields by triangulation or by taking a sight from a point on the boundary. Definite instructions for their guidance in the survey of new lands are now being drawn up. The inspection and repair of survey marks is still far from satisfactory, especially in the Nalbári, Nomáti, Hájo, and Barkhetri circles, and the Deputy Commissioner's attention has been drawn to the Chief Commissioner's orders on the subject in paragraph 8 of his Secretary's letter No. 409Agri.—8976R., dated the 6th December 1893, reviewing the report of this department for the year 1892-93. A good deal of work has been done in the way of erecting jungle mounds to aid the mandals in their survey of new lands, the necessity for which is especially great in Kámrúp, owing to the fact that ordinary theodolite stations were not demarcated during the earlier years of the cadastral survey, but the total number yet put up is far from adequate, and many more must be erected before the work can be held to have been completed. In the matter of testing, many deficiencies were noticed, both in the number and length of check-lines run, and in the action taken on their check-lines by testing officers. The steps which are being taken in order to increase the efficiency of test measurements have been described in paragraph 20 of this report.

Darrang.—There are 6 supervisor kánungos and 106 mandals in the cadastrally-surveyed area of Darrang. Of these, Mr. O'Donel saw all the supervisor kánungos and 79 mandals, and I inspected the work of all the supervisor kánungos and 105 mandals. The rewriting of the papers relating to decennial holdings and grants, and the calculation of the revenue at the new rates had retarded work very considerably. In Tezpur, moreover, this was the first year of settlement on cadastral results, and this was another cause of delay in preparing the settlement papers. The practice of copying fields from the map of the previous year without testing them on the ground, which has been mentioned as still common in Kámrúp, is also prevalent in Mangaldai. The condition of theodolite station marks in Mangaldai is, on the whole, very satisfactory. In Tezpur, however, this is not yet the case, and much careful attention to the subject will be necessary, in order to prevent the marks erected at the time of the survey from disappearing. The work of keeping up the records prepared in connection with the cadastral survey of the sadr subdivision, which were made over to the Deputy Commissioner last year, has been well started, and the Sub-Deputy Collector and the kánungos have taken pains to ensure the accuracy of the mandals' survey work.

Nowgong.—There are 8 supervisor kánungos and 151 mandals in the cadastrally-surveyed area of the district. Mr. O'Donel inspected the work of all the kánungos and 147 mandals, and I saw all the kánungos and 149 mandals. No mandal escaped inspection altogether. The condition of the mandals' maps and records in this district is, on the whole, satisfactory, and a considerable improvement is noticeable since last year—a result which is largely due to the energy of the Sub-Deputy Collector, Babu Lakshmi Náth Kataki. Many matters, however, still require attention,—the marks denoting theodolite stations are not yet so uniformly good as they should be; old cultivation is still often inked in on the map before it is tested on the ground; defective methods of survey are still common, and some garden lands, which should have been entered as *basti* were found to have been wrongly classed as *jaringati*. Some fudging was noticed in the returns of check-lines run, and the crop returns prepared by the mandals were found to be very unreliable, especially in the case of *faringati* lands on which *ahu* (early rice) and mustard are grown.

Sibság r.—There are 9 supervisor kánungos and 191 mandals in the cadastrally-surveyed portion of the district. I saw all the kánungos and 161 mandals. As already mentioned, Mr. O'Donel made no inspection in this district during the year. In Golághát, re-assessment operations had retarded the work greatly. In Jorhát and at the sadr, the work was also backward, but not so much so as in Golághát. The condition of theodolite stations throughout the district is not satisfatory, but since the date of my visit, energetic measures have been taken by the district authorities to place all such marks in a state of thorough repair. As in other districts, old cultivation is still often inked in on the new maps without being tested on the ground, and in many cases the mandals' methods of survey were found to be very defective. The supervision of the supervisor kánungos was found to be very slack, especially in Golághát.

Lakhimpur.—There are 3 supervisor kánungos and 46 mandals in the cadastrally-surveyed portion of this district. Mr. O'Donel did not visit the district. I inspected the papers of all the kánungos and 43 out of the 46 mandals. In the sadr subdivision, the work generally was very backward, partly owing to the fact that this was the first year of settlement on the basis of cadastral survey, and partly to the time of the Sub-Deputy Collector having been almost entirely taken up by the resurvey of periodically-settled estates in the non-cadastral tracts, the area of which exceeded 50 *bighas*, so that he had very little time to devote to the supervision of the ordinary settlement operations. The survey work of the mandals is defective in many respects and in some cases new fields were found to have been plotted on the maps, without any attempt being made to ascertain their true position. The maintenance of theodolite stations also requires very close and careful attention. The attention of the Deputy Commissioner has been drawn to the necessity of directing the Sub-Deputy Collector to devote a much larger portion of his time to the supervision of cadastral work during the current year. In the North Lakhimpur subdivision, the work was backward, but the measurements for the supplementary settlement had all been completed before the date of my inspection. The preservation of the marks denoting theodolite stations will have to be attended to most carefully, and the mandals still require much supervision and instruction before they can be considered competent surveyors. The number of objections to the cadastral survey filed before the district authorities has been particularly numerous in both subdivisions, and the attention of the Deputy Commissioner has been drawn to the standing orders on this subject, which are contained in the Chief Commissioner's Circular No. 54R., dated the 9th September 1890, and letters Nos. 1347A. and 6306R., dated, respectively, the 25th August and 12th December 1892.

Inspections by Sub-Deputy Collectors.

18. The statement below shows briefly the work done by the Sub-Deputy Collectors in the matter of inspecting village records during the year under review :

District.	Subdivision.	Total number of mandals.			Number of mandals whose		Remarks.
		In mauzas cadastrally surveyed.	In mauzas not cadastrally surveyed.	Total.	Papers examined and checked in cadastral and non-cadastral mauzas.	Maps checked (in cadastral mauzas).	
Goálpára ...	Dhubri ...	...	35	35	4	...	
Kámrúp ...	Barpeta ...	52	17	69	60	36	
	Gauháti ...	198	33	231	149	88	
Darrang ...	Mangaldai ...	77	6	83	77	...	
	Tezpur ...	29	31	60	60	25	
Nowgong ...	Nowgong ...	151	15	166	152	107	
Sibságar ...	Golághát ...	47(*a*)	4	51	51	37	(*a*) Exclusive of 6 mandals of Abatguri.
	Jorhát ...	78(*b*)	6	84	35	24	(*b*) Inclusive of 6 mandals of Abatguri.
	Sadr ...	66	4	70	70	45	
Lakhimpur ...	North Lakhimpur ...	19	14	33	33	14	
	Dibrugarh ...	27	48	75	52	7	
Sylhet ...	Karimganj ...	2(*c*)	...	2	2	2	(*c*) These are settlement muharrirs of the Pratabgarh tahsil.
	Total ...	746	213	959	751	385	

The amount of inspection done in the Dhubri and Mangaldai subdivisions seems to have been insufficient. In addition to their survey and settlement work, many Sub-Deputy Collectors (especially in the Surma Valley) are called upon to try criminal cases, while others are required to note upon revenue cases and to put up revenue papers to the Deputy Commissioner or Subdivisional Officer for orders.

14. In the statement below, brief details are given as to the inspection work done by Deputy Commissioners and Subdivisional Officers; full particulars will be found in Appendix C:

Inspections by Deputy Commissioners and Subdivisional Officers.

Name of officer.	Designation.	Subdivision.	Supervisor kánungos.		Mandals.				
					In cadastral area.			In non-cadastral area.	
			Total number.	Whose work inspected.	Total number.	Whose papers examined.	Whose maps checked.	Total number.	Whose work inspected.
G. Gordon, Esq. ...	Deputy Commissioner	Dhubri ...	...	...	...	...	...	17	6
Babu Mádhab Chandra Bardalai.	Extra Assistant Commissioner.	Barpeta ...	3	1	52	5	5	17	6
		Gauhati ...	11	...	198	...	...	33	...
R. E. Ranson, Esq. ...	Assistant Commissioner	Mangaldai ...	} 4	...	77	{ ... 33	... 3	} 6	{ ... 6
Lieut. A. A. Howell ...	Ditto ...	Ditto ...							
Babu Akhaya Kumár Cháturji.	Extra Assistant Commissioner.	Ditto ...				6	1		5
		Tezpur ...	2	...	29	...	...	31	...
		Nowgong ...	8	...	151	...	...	15	...
		Golághát ...	2	...	47*	...	...	4	...
W. A. M. Duncan, Esq.	Assistant Commissioner	Jorhát ...	{ 4 ...	4 2‡	78† ..	51 ...	14 4‡	6 ...	... ..
C. W. E. Pittar, Esq.	Deputy Commissioner	Sibságar Sadr ...	{ 3 ...	... ...	66 ...	20 ...	6 1‡	4 ...	1 ..
W. B. Brown, Esq. ...	Assistant Commissioner	North Lakhimpur	1	...	19	...	3	14	3
Munshi Azizar Rahaman.	Extra Assistant Commissioner.	Dibrugarh ...	2	...	27	...	...	48	1
		Total ...	40	7	744	115	37	213	28

* Inclusive of 6 mandals of Ahatguri.
† Inclusive of 6 mandals of Ahatguri.
‡ In connection with extension survey

By far the best outturn in this respect is that of Mr. Duncan, who inspected the work of his four supervisor kanungos and of 51 out of 78 mandals employed in the cadastral area in his subdivision, of Mr. Howell during the short time he was in charge of the Mangaldai subdivision, and of Mr. Pittar, Deputy Commissioner of Sibságar. The other district officers only inspected the papers of one supervisor kánungo and 11 mandals between them. In my opinion a great deal more might be done by Deputy Commissioners and Subdivisional Officers in the matter of inspecting the papers and maps of mandals and supervisor kánungos than has hitherto been the case. To go into the field and run check-lines takes up time, which these officers are frequently unable to spare from other duties, but to inspect the settlement maps and records is a task which can be carried out piecemeal as opportunity occurs. In order to facilitate such inspections, a set of instructions for testing the maps and other records is now under preparation, and will shortly be submitted to the Chief Commissioner for approval.

15. The subjoined statement shows the testing work done by the Superintendent of Land Records during the past two years:

Testing by Director and Superintendent of Land Records.

Name of district or subdivision.	Number of check-lines.		Number of fields.		Number of offsets.		Length of check-lines in miles.		Number of cases in which resurvey was ordered.	
	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.
Barpeta ...	47	107	374	98	467	172	13·04	5·99	9	2
Gauháti ...	35			375		536		13·96		6
Mangaldai ...	8	9	89	96	126	124	3·03	4·84	2	1
Nowgong ...	33	21	306	221	442	337	12·62	11·07	5	3
Sibságar (district) ...	29	...	269	...	400	...	9·83	...	5	...
Total	116	76	1,038	790	1,435	1,169	38·52	35·36	21	12

Details of my own testing are not available in the above form, but it may be noted that the length of check-lines (20 in number) run by me was 8·62 linear miles. Testing can, as a rule, only be carried out at places where a halt is made, as it is not until after the maps have been inspected that it is possible to see where check-lines can usefully be run. Having had to spend the first two months of my tour in the Surma Valley, it was necessary to travel very rapidly in order to complete my inspection of land records in the Assam Valley, and I was thus seldom able to spare time to make a halt for the purpose of running check-lines.

Mr. O'Donel's record is not quite so full as in the previous year, but it is nevertheless a distinctly creditable one.

Testing by Sub-Deputy Collectors.

16. Details of the testing done by the Sub-Deputy Collectors are given in Appendix D.

As regards testing by check-lines, the best outturn reported is that of Babu Lakshminath Kakati, of Nowgong, who claims to have run 172 check-lines, aggregating 72·44 linear miles. Babu Bholanáth Dás, Munshi Didaruddin Bora, and Párbati Sankar Kár come next with 58·66, 22·41, and 21·25 linear miles, respectively. The best return of checking in the unsurveyed tract, where land is measured up after the old mauzadári fashion, was done by Mashiat Ulla (1,711 acres) and Rajani Kánta Bardalai (1,523 acres); both these officers had very few cadastral mandals to deal with. The largest amount of concealed cultivation (20 acres) was discovered by Munshi Didaruddin.

In connection with the figures given in Appendix D, I may mention that it has hitherto been the practice, where a Sub-Deputy Collector runs a check-line accompanied by the supervisor kánungo, for both officers to take credit for the line, and thereby to produce a total of testing considerably in excess of that really done. Instructions have recently been issued directing that check-lines run independently and lines run in company with other officers shall be shown separately in future returns. In one case, it was found that a Sub-Deputy Collector had added to his return the length of some check-lines run by a supervisor kánungo in his neighbourhood over land of which he had retained the map. Although there is no doubt that by this plan the accuracy of the supervisor kánungo's check was guaranteed, it is clear that the work done should never have been credited to the Sub-Deputy Collector.

Testing by supervisor kánungos.

17. The testing work done by supervisor kánungos during the year is shown in Appendix L. The greatest length of check-lines was run by Bhagirath of Raha in Kámrúp, who did 85·68 linear miles, though Basir Ali of Barpeta ran him very close with 84·95. Molán Chandra of Patidarrang did 73·14 miles and Dhir Sing of Támbulpur 57·52. Outside Kámrúp, the best returns are those of four Nowgong kánungos, *viz.*, Gunarath of Dhing (68·10 miles), Sibnáth of Raha (56·18 miles), Jairám of Doboka (47·22 miles) and Rámrath of Silghát (35·79 miles). The amount of testing required varies of course with the area of fluctuating cultivation, so that the same length of check-lines is not required in the permanent circles of Tezpur, Sibságar (excluding the Májuli), and Lakhimpur sadr, as in the case of the fluctuating cultivation of Barpeta, Hájo and Barkhettri in Kámrúp and in the Chápari mauzas in Nowgong. The largest area of fluctuating cultivation is reported from Basir Ali's circle (Barpeta) in Kámrúp, where his testing gives an outturn of 3¼ linear miles per square mile of fluctuating cultivation. The way in which supervisor kánungos carry out test measurements leaves much to be desired, and orders have been issued since the close of the year, insisting on the rigid observance of the rules which lay down that traces of all lines run are to be made and kept in the field-book, so as to be available for examination by inspecting officers. Instructions have been given as to the time when and manner in which action should be taken in the case of mistakes disclosed by the check-lines, and Sub-Deputy Collectors have been directed to make a point of testing the accuracy of the supervisor kánungos' work by comparing their traces with the mandals' maps and by running as many lines as possible over those already run by supervisor kánungos.

Testing by tahsildárs, mauzadárs, &c.

18. The testing work done by tahsildárs is shown in the statement which forms Appendix F, and that carried out by mauzadárs, tahsil muharrirs, &c., in Appendix G. The longest mileage of check-lines amongst tahsildárs stands to the credit of Babu Keshav Chandra Singh of Raha in Kámrúp, who did 41·66 miles; Babu Uday Chandra Barua of Hájo coming next with 31·66, and then Babu Rádhanáth Barua of Rangiya with 20·28 miles. As in previous years, Babu Rabi Chandra of the Tezpur tahsil tested the largest area of unsurveyed land by the old mauzadári method (4,311 acres); Babu

Nibáran Chandra Mukarji of Bijni tested 1,820 acres in the same way. Babu Banga Chandra Chaudhuri of Boko discovered the largest area of concealed cultivation (106 acres); and Babu Káli Ram Chaudhuri of Chhaygaon found out the largest area of incorrect classification. Amongst mauzadárs, those of Mangaldai did the most testing with check-lines (63·27 linear miles), and those of Dhubri the largest amount of re-measurement in unsurveyed tracts (3,537 acres).

Tahsildárs and mauzadárs are beginning to realize their responsibility in the matter of running check-lines, but the total work done is still very much less than it should be. The return, moreover, is not altogether genuine; in many cases credit is taken by tahsildárs for lines run in their company by supervisor kánungos, by whom all the work connected with the keeping of the field book, the plotting, &c., is done. One tahsildár, who claims to have run nearly 40 miles of check lines during the last two years, was found, when I examined him, to be so ignorant of surveying that he took over half an hour to plot three sides of a field, and then did it wrongly. I fear that it will be a long time before tahsildárs, as a body, produce a good outturn of really useful testing. As regards mauzadárs and tahsil muharrirs, I am inclined to think that it would be as well if we recognised that few of them are ever likely to be able to do much good in the matter of running check-lines. There is much useful work to be done in the way of testing classification and the crop entries, and in checking the totalling of the entries in the *dák-chitháis* and *jamábandis*, and it might be as well if they were directed in the first instance to devote whatever time they can spare to work of this nature, which they are quite as competent to perform as any one else.

Testing by Deputy Commissioners and Subdivisional Officers.

19. The net results of the testing carried out during the last two years by Deputy Commissioners and Subdivisional Officers are given in the following statement. Details of the work done by each officer will be found in Appendix C:

District.	Subdivision.	Testing by check-lines.						Testing without check-lines.			
		Total area surveyed up to		Total area of fluctuating cultivation.		Linear miles of check-lines run.		Total area measured in		Area tested.	
		1892-93.*	1893-94.†	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.
1	2	3	4	5	6	7	8	9	10	11	12
		Sq. miles.	Sq. miles.	Acres	Acres.			Sq. miles.	Sq. miles	Acres.	Acres.
Goalpára ..	Dhubri	..	..	..	..	..	..	2,854·00	2,854·00	..	103
	Goalpára	..	..	..	..	..	..	1,570·00	1,570·00	..	..
Kámrup ..	Barpeta	330·21	440·21	18,683	24,695	0·91	3·68	826·79	783·79	66	241
	Gauhátí	1,509·68	1,570·81	49,001	45,309	..	..	1,184·32	1,073·39	..	..
Darrang ..	Mangaldai	641·00	657·00	6,183	11,306	1·37	2·74	688·35	688·46	100	567
	Tezpur	211·19	213·16	..	4,109	..	..	1,269·00	1,269·00	..	..
Nowgong ..	Nowgong	1,002·29	1,636·31	44,841	26,187	0·49	..	2,257·48	2,254·42	261	..
	Golaghát	259·24	259·24	2,849	6,340	..	..	811·84	591·6	..	..
Sibságar ..	Jorhat	658·74	658·98	5,129	7,126	0·42	1·29	382·06	368·05	..	..
	Sibságar	647·08	651·99	4,464	14,867	1·06	2·31	402·97	368·05	7	6
	North Lakhimpur ..	89·26	89·26	..	1,972	..	1·72	1,089·34	1,089·34	10	102
Lakhimpur ..	Dibrugarh	189·19	189·19	..	1,945	..	..	2,373·81	2,373·81	5	9
Total ..	.....	5,340·22	6,587·97	1,16,631	1,49,396	13·25	12·77	18,453·96	18,249·93	449	527

* This includes the whole of the area surveyed by the professional agency up to 1891-92, and the 111·64 square miles done in 1889 and 1890 during the Barpeta experimental survey, and the 21·46 square miles done in Boko in 1891-92 as an extension of that survey, but excludes the area surveyed by local agency in different districts during the cold season of 1892-93.

† This includes the whole of the area surveyed by the professional agency up to 1891-92 and the areas surveyed by local agency up to 1892-93, but excludes the areas surveyed by local agency during the cold season of 1893-94.

The total length of check-lines is only 12·77 miles or less even than in the previous year. There was a slight increase in the area tested without check-lines, but the total outturn of work is very small indeed. Mr. Pittar is the only Deputy Commissioner who ran any check-lines (3·81 miles) and Mr. Gordon, the only one who tested measurements according to the old mauzadári method (108 acres). The testing done yearly since 1880-81 is noted in the margin. From these figures it seems doubtful whether any appreciable amount of checking will ever be furnished by district officers, and it is perhaps a question whether it would not be preferable to require more from them in the matter of closely watching the testing operations of the special staff of Sub-Deputy Collectors, *supervisor kánungos*, &c., which has of late years been appointed for the express purpose of testing the mandal's work, rather than to continue to ask for a large personal outturn of testing, which experience

Year.	Length of check-lines, in miles.	Area tested without check-lines, in acres.
		Acres.
1880-81 ...	.....	5,704
1881-82 ...	.....	8,213
1882-83 ...	.....	8,503
1883-84 ...	.....	3,011
1884-85 ...	.....	3,893
1885-86 ...	.....	2,770
1886-87 ...	.....	4,485
1887-88 ...	.....	2,954
1888-89 ...	8·57	2,659
1889-90 ...	1·84	3,579
1890-91 ...	*Nil.*	1,426
1891-92 ...	7·29	390
1892-93 ...	13·25	448
1893-94 ...	12·77	527

seems to show is not likely to be attained, and which perhaps is less necessary than it used to be when there was no special agency available for the purpose. In paragraph 14 above, I have expressed my opinion that a good deal more might be done by district officers than they do now in examining the mandals' records in office.

Total testing done.

20. In the following statement the total testing done in the cadastrally-surveyed area by means of check-lines is compared with the total area of fluctuating cultivation :*

District.	Subdivision.	Number of linear miles of check-lines per square mile of fluctuating cultivation.					
		By Director of Land Records and Superintendent of Land Records.	By Sub-Deputy Collectors.	By supervising kánungos.	By tahsildárs, mauzadárs, &c.	By District Officers.	Total.
Kámrúp ...	Barpeta ...	0·19	0·57	5·00	1·86	0·09	7·71
	Sadr	0·23	0·82	5·72	1·56	.....	8·33
Darrang ...	Mangaldai ..	0·33	0·68	7·26	4·10	0·09	12·46
	Tezpur	...	2·48	1·76	8·56	.....	12·80
Nowgong ...	Nowgong ..	0·32	1·73	7·05	0·96	...	10·06
Sibságar ...	Golághát ...	..	2·23	0·85	0·62	.....	3·70
	Jorhát ..	.	0·58	2·54	0·85	0·18	4·15
	Sadr ..	.	0·75	0·94	1·01	0·14	2·84
Lakhimpur ...	North Lakhimpur...	...	5·45	7·55	.....	0·37	13·37
	Dibrugarh	..	1·94	9·26	...	.....	11·20

This statement is defective in several respects. In the first place, it was until recently a common practice for the Sub-Deputy Collector to require the supervisor kánungo's attendance when running check-lines, and for both officers to take credit for the amount of testing done, while, as already explained, the returns of testing by tahsildárs are in most cases far from genuine. Moreover, although check-lines run in the area now being surveyed by non-professional agency have been excluded from the statement wherever possible, separate figures have not always been available. Efforts are being made to obtain greater accuracy in these respects in future, but even when this is done, the comparison will still be defective, partly because the check lines are seldom or never run the whole way through new cultivation, and partly because it is often necessary to run check lines through cultivation which does not come within the definition of "fluctuating," in order to test the accuracy of work traced from the old maps. The mandals frequently fail to observe the rule that all cultivation traced from the old map must be tested on the ground before it is inked in on the new map, and although their neglect to do so *can frequently* be detected from an examination of the map without going to the field, it is sometimes necessary to run check lines over these fields, either to verify the mandal's assertion that he has himself tested them, or to see whether his neglect to do so has resulted in such inaccuracy to make it necessary to order a resurvey of the fields in question.

The figures given in the above statement are nevertheless the best guide we have as to the sufficiency of the work done, and is the only basis on which the outturn of work in the different districts can be compared. The proportion of testing by Sub-Deputy-Collectors is below what it should be in both subdivisions of Kámrúp, and in Mangaldai, Jorhát, and Sibságar sadr. The comparatively high returns for *Tezpur, Golághát,* and North Lakhimpur are due to the small area of fluctuating cultivation in these subdivisions. The *testing carried out by* the Sub-Deputy Collector of Dibrugarh, although sufficient as a mere matter of proportion, is not very satisfactory when it is remembered how small the fluctuating area is, and that the year was the first in which the mandals worked on

* Fluctuating area is defined in rule 99 of the Rules for the Maintenance of Settlement Maps and Records as meaning the total of the following areas :

(1) Relinquished land retaken.

(2) New lands for regular settlement.

(3) Ditto for supplementary settlement.

the basis of the cadastral maps. The testing of supervisor kánungos, is so far as the return goes, good everywhere, except in Tezpur sadr and the three subdivisions of the Sibságar district. The best returns (on paper) of testing by tahsildárs, &c., come from the two subdivisions of the Darrang district, but, as already noted, the figures showing the testing by these officers are often misleading, and the work actually done by them is seldom worth very much.

Registrar kánungos.

21. The arrangements which have been made to provide each subdivision with a registrar and an assistant registrar kánungo, were described in paragraph 23 of the last departmental report. The duties of these men are to keep the record of rights for periodically-settled estates and to record in them the changes resulting from orders in mutation cases, to keep and issue the maps, instruments and forms required for settlement purposes and to maintain registers of the same, and to prepare the weekly abstracts of mandals' diaries, &c. I inspected the offices of all registrar kánungos in the Assam Valley Proper, and found that, on the whole, the procedure laid down in Part V of the Rules for the Maintenance of Settlement Maps and Records was being fairly well adhered to; such errors of procedure as were noticed, were pointed out at the time to the Deputy Commissioners concerned.

As regards their duties in connection with the General Register of periodically-settled estates, however, there was much room for improvement. The notification declaring that the second copy of the periodic *jamábandi* (which forms the record of rights in the case of periodically-settled estates) should be kept at sadr or subdivisional headquarters, had been overlooked at Barpeta, Mangaldai, Nowgong, and Jorhát, and in these subdivisions the *jamábandis* in question were still kept at tahsils. Moreover, the rules laid down in the Chief Commissioner's Circular No. 26R. dated the 24th June 1893, for the correction of the register, in accordance with the orders passed in mutation cases, had not, as a rule, been fully acted up to. The main reason for this is doubtless that the whole of the settlement work in the Assam Valley was greatly retarded last year by the recopying of the periodic *jamábandis* and the re-assessment operations, and the rules in question will no doubt be more carefully observed in the course of the current year, now that the derangement of routine work due to these special causes has ceased. The attention of district officers has been drawn to the subject, and the matter will again receive careful attention during my next cold-weather tour.

In this connection it may be noticed that it is not only the necessity of correcting the general register in accordance with orders in mutation cases that requires attention; the small number of mutation cases filed is also a matter that needs to be looked to. When the cadastral survey was effected, the opportunity was taken to bring the record of rights up to date, but since then it has been gradually becoming obsolete, owing *to the failure of* persons coming into possession of estates by succession, purchase, &c., to apply for registration of their interests under Chapter IV of the Land and Revenue Regulation. Section 58 of the Regulation enables district officers to insist on such persons applying, and a form of notice calling upon them to apply has been prescribed in the rules framed under Chapter IV. Recent enquiries tend to show that the number of such notices issued is far smaller than it should be, and the manner in which the existing procedure may be improved upon is now under consideration.

Circles of supervisor kánungos and mauzadár.

22. The redistribution of mandals' circles and the appointment of new supervisor kánungos in the areas surveyed cadastrally in 1891-92, although carried out in the early part of the year under review, was fully discussed in paragraphs 24 and 25 of the report of this department for 1892-93, and there is, therefore, no necessity for again describing the changes effected. Beyond these changes, no alterations of any importance were made in the district staff during the year. Since its close a few changes have been made in Darrang, in consequence of the alteration in the boundary between the sadr subdivision and Mangaldai, but these will be dealt with in the report for 1894-95.

Condition of survey marks.

23. The condition of survey marks as reported by the district authorities is shown in Appendix II. The information is not yet accurate, but steps are being taken to improve the return. Traces of the area under each supervisor kánungo, on which are shown the different kinds of marks put up by the survey party, have recently been supplied by the Superintendent of Survey, and instructions are now under issue with a view to the utilisation of these traces for the preparation of a correct return of the number of the different kinds of survey marks which are actually in existence, and of the number of the same which are inspected and repaired in the course of each year.

The condition of the mounds with living *simul* boughs which are used to denote ordinary traverse stations, which were examined during the year by me, the Superintendent of Land Records and the Sub-Deputy Collectors, is shown below. The statement does not include triple-junction points, which are in all cases demarcated by stone prisms.

District or subdivision.	Inspected by Director of Land Records.			Inspected by Superintendent of Land Records.			Inspected by Sub-Deputy Collectors.			Total number inspected.		
	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.
Barpeta	31	23	74·2	98	71	72·45	141	107	75·89	270	201	74·44
Gauháti	57	34	59·6	198	112	56·56	93	54	58·06	348	200	57·47
Mangaldai	224	197	87·95	177	144	81·35	252	252	100·00	653	593	90·81
Tezpur	68	52	76·47	99	66	66·66	446	411	92·15	613	529	86·29
Nowgong	209	146	69·85	433	309	71·36	876	715	81·62	1,518	1,170	77·07
Golághát	47	31	65·96	...	...	...	389	272	69·92	436	303	69·49
Jorhát	80	59	73·75	...	...	...	416	251	60·34	496	310	62·50
Sibságar Sadr	69	37	53·62	...	...	...	483	310	64·18	552	347	62·86
North Lakhimpur ...	20	14	70·00	...	...	...	551	484	87·84	571	498	87·21
Dibrugarh	37	28	75·67	...	...	...	378	309	81·75	415	337	81·20
Total	842	621	73·75	1,005	702	69·85	4,025	3,165	78·63	5,872	4,488	76·43

From this it would appear that, ont of 5,872 stations examined, 4,488, or 76·43 per cent., contained living boughs. It must, however, be remembered that all boughs were counted as living which were not actually dead, and that many of these may have died afterwards. It must also be borne in mind that the greater number examined were roadside mounds, to which the mandals would naturally give more attention than to those in jungle, which are more difficult of access, and are less likely to be seen by inspecting officers. But, making all allowances, there can be no doubt that the number of permanently-demarcated stations is yearly increasing, and that the importance attaching to their preservation is gradually coming to be appreciated by district officers. In Sibságar, in particular, strong executive action is now being taken with a view to the proper maintenance of all survey marks. A good deal of trouble will, however, always be required to keep these mounds in repair and to replace dead *simul* trees by new ones. Steps are being taken to avoid this difficulty in the cadastrally-surveyed area in the Surma Valley by substituting for them country stones measuring 2′ by 1′ by 6″, which are there easily procurable at a very low price.

Demarcation of special tenures.

24. In the course of the cadastral survey, much difficulty was experienced in determining the proper boundaries of *la-khiráj* and *nisf-khiráj* estates and of waste land grants settled under the rules which have from time to time been in force for the encouragement of special cultivation. This was partly owing to defects in the original survey and partly to the neglect of the proprietors and landholders concerned to erect boundary marks. Steps are now being taken to prevent the recurrence of such difficulties in future, by putting up marks on the boundaries of such estates, at all points at which they appeared to the Settlement Officer, Assam Valley Districts, to be necessary. Stone prisms for the more important points have been ordered from Calcutta,* and concrete blocks (2′ 2″ by 10″ by 8″) for the minor points are being manufactured locally. These prisms and blocks are now being distributed to convenient centres, and the work of demarcation will be carried out next cold weather In the meantime rules under section 27 of the Land and Revenue Regulation for the recovery of the cost of demarcation from the proprietors, landholders, &c., concerned have been drafted and submitted to the Chief Commissioner for approval.

Advances and recoveries on account of cadastral survey operations.

25. The following statement shows the advances on account of cadastral survey operations in each district outstanding at the close of the year under review :

* I tried in vain to get them manufactured locally.

District.	Prisons.					Concrete blocks.					Total outstanding on 31st March 1894.
	Outstanding on 31st March 1893.	Advances made during 1893-94.	Total.	Recovered or credited during 1893-94.	Balance outstanding on 31st March 1894.	Outstanding on 31st March 1893.	Advances made during 1893-94.	Total.	Recovered or credited during 1893-94.	Balance outstanding on 31st March 1894.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Cachar	.....	8,764 12 8	8,764 12 8	.....	8,764 12 8	.....	.....	.....	.....	.....	8,764 12 8
Sylhet .. Pratabgarh	633 1 1	.....	633 1 1	.....	633 1 1	.....	.....	.....	.....	.....	633 1 1
Sylhet .. Jaintia	5,053 3 8	22 2 8	5,075 6 2	.....	5,075 6 2	.....	.....	.....	.....	.....	5,075 6 2
Kámrúp	5,328 8 8(a)	387 12 0(b)	5,716 4 3	2,174 5 10	3,541 14 5	238 11 0	9,854 9 3	10,093 4 3	.....	10,093 4 3	13,135 2 8
Darrang	4,089 2 4	214 9 6	4,303 11 10	.....	4,303 11 10	.....	296 10 10	296 10 10	7 10 0(c)	289 0 4	4,592 12 2
Nowgong	6,976 12 5	.....	6,976 12 5	.....	6,976 12 5	166 15 0	373 9 3	540 8 3	.....	540 8 3	7,517 4 8
Sibságar	18,609 13 5	13 8 10	18,623 6 3	104 0 0(c)	18,519 6 3	891 1 6	258 2 0	1,149 3 6	.....	1,149 3 6	19,667 9 9
Lakhimpur	3,742 3 4	186 7 0(d)	3,928 10 4	.....	3,928 10 4	.....	.....	.....	.....	.....	3,928 10 4
Total	44,842 12 6	9,589 4 6	54,432 1 0	3,279 5 10	51,252 11 2	996 11 6	11,782 15 4	12,779 10 10	7 10 6	12,772 0 4	64,024 11 6

(a) Of this, Rs. 88-8-0 are recoverable from the *pyks* of Gauhátí.
(b) Ditto 287-12-0 ditto ditto.
(c) Represents price of 30 stones transferred from Sibságar to Lakhimpur.
(d) Includes price (Rs. 105) of 20 stones transferred from Sibságar to Lakhimpur.
(e) Was drawn through an oversight, and subsequently refunded.

During the year, a sum of Rs. 5,174-5-10 was realized under the head "Prisms" from the ryots of the Kámrúp district. The collection of the balance outstanding has been stopped pending the decision of the question as to what occupants of land are liable to contribute, and whether any portion of the cost of erecting survey marks should be borne by the State.

Extension of survey.

26. The statement below shows the tracts surveyed by the mandals during 1893-94 under the supervision of their supervisor kánungos, together with the approximate area surveyed. Exact figures cannot be given, as the operations have not yet been brought to a close. A complete review of the work done in each subdivision and of the financial results of the same will be submitted later on.

District.	Subdivision.	Name of tract.	Approximate area. Sq. miles.
Kámrúp ...	... Barpeta ...	... Paka, Hastinápur and Bhabáni pur	31·69
„ ...	... Gauháti ...	... Rámsha, Chhaygaon, Pántan, and Paschim Chamaria ...	32
Darrang ...	... Mangaldai...	... Shekhár and Rangápáni ...	42·36
Nowgong...	... Nowgong ...	... Borbhagia, Mikirbheta, Gerua, Ghugua, Garubat, and Juria.	60
Sibságar ...	... Golághát ...	... Rangámáti, Morangi, and Ghilladhari	22·75
„ ...	... Jorhát ...	... Chaukhát and Baligáon ...	24
„ ...	... Sadr ...	... Konwárpur, Khalai Ghogra, and Abhoypur ...	36·95
Total ...	... ...	... ...	249·75

No extension work was done in the sadr subdivision of Darrang or in the Lakhimpur district, where the cadastral papers had only recently been received by the mandals, and where much had to be done in the way of teaching them how to maintain the records prepared by the professional party. The total area taken up elsewhere was about 250 square miles, or very nearly two-fifths of the average area surveyed annually by the professional party since it broke ground in the Province in 1883-84. It is no doubt highly desirable to complete the cadastral survey of the whole of the cultivated area in the Assam Valley as soon as possible, but it is still more necessary to avoid the danger of attempting too much, as, if too much is undertaken, the whole time of the supervisor kánungos has to be given to the supervision of extension survey, and the ordinary work of the mandals escapes inspection. The Sub-Deputy Collector also is unable to test the boundaries of the new maps and the area calculations with the thoroughness required by the rules, and his inspection of ordinary work is greatly interfered with, if the area of extension survey in a subdivision is inconveniently large.

Last cold weather re-assessment operations had thrown back ordinary work to such an extent, that it was not found possible to depute men to extension survey until nearly the end of January. The result is that field work has been greatly delayed, and in some places is still going on.

The progress of survey work in the different subdivisions was inspected by the Superintendent of Land Records and myself, but, as it is proposed to report separately on the subject when the final results of the operations are known, it will be more convenient to include in that report such observations as may be needed on the subject of our inspections.

In order to make sure that the maps prepared in the course of extension survey are thoroughly reliable and accurate, I have arranged to add a further test to those laid down in the Extension of Survey Rules. The maps of all areas surveyed in extension, after being passed by the Sub-Deputy Collector, will be sent to the Superintendent of Land Records, during his recess at Tezpur, so that the boundaries may be compared by him and the calculation of areas tested under his supervision by means of the planimeter.

Since the close of the year, the Chief Commissioner has sanctioned a proposal made by me to demarcate the trijunction points of villages surveyed in extension by stone prisms, in the same way as village trijunctions in the area surveyed by the professional party are demarcated, and arrangements are now being made to carry out this work as soon as possible. Hitherto the only survey marks erected in areas surveyed in extension have been earthen mounds with *simul* boughs planted in the centre. Such marks are very useful for denoting ordinary traverse stations as supplementing the more permanent demarcation carried out at triple-junction points, but it would be scarcely safe to rely on them alone for future use.

In last year's report it was stated that arrangements were being made to train a few men in the use of the theodolite during the rains with a view to substituting a regular theodolite traverse for the plane-table boundary survey, which has hitherto been resorted to. On consulting Deputy Commissioners, it was found that re-assessment operations stood in the way of deputing men to the proposed training class at Tezpur, and the matter was, therefore, allowed to stand over. I am now again addressing Deputy Commissioners on the subject, and the action taken will be noted in next year's report. The matter is, however, one of no great urgency, for, although a theodolite survey would have greater pretensions to scientific accuracy, the plane-table boundary survey is, if carefully carried out, sufficiently correct for all practical purposes, so far as the correct measurement and assessment of the area enclosed by it is concerned.

II.—ANALYSIS OF DISTRICTS WITH REFERENCE TO SECURITY FROM FAMINE.

[*Nil.*]

III.—SYSTEM OF COLLECTION OF REVENUE AND RENTAL IN PRECARIOUS TRACTS.

[*Nil.*]

IV.—MEASURES OF PROTECTION.

Measures of protection.

27. The only measures of protection required in this province are those connected with the water-supply. In some places, embankments are required to keep out the flood water; in others channels are needed to allow it to escape or for the purpose of irrigation. In the days of native rule much attention was given to this subject; at the present time very little is being done, the reason usually assigned being that in a province where so much waste land fit for cultivation is available, it is useless to spend much money in improving the condition of particular tracts. A certain amount of money is spent annually by some of the Local Boards, but I know of no work of sufficient importance to deserve special mention.

Sometimes, in the course of my examination of the cadastral maps, it appeared that wholesale resignations had taken place in particular villages. Where enquiry showed that this was due to some preventible cause, such as the construction of a road or railway embankment with insufficient waterway, or to the silting up of the bank of a stream, or the breaking of an existing embankment designed to protect fields in the neighbourhood of a hill stream from inundation, the matter was brought to the notice of the district officer for such action as he might consider necessary in order to remedy the mischief.

Famine.

28. Although, as has often been pointed out, famine is unknown in Assam, temporary scarcity due to excessive floods is sometimes found to occur. This was the case last year in the Surma Valley, in North Sylhet and Karimganj, and, to some extent also, in the South Sylhet subdivision, where heavy rains in the latter part of July caused a steady rise in the flood level, which destroyed a large portion of the *áman*, *áus* and *murali* crops. There was a rapid subsidence of the water in September, which enabled a crop of *sáil* to be planted out, but the season was then far advanced, and the results were not very satisfactory. The failure of crops was not sufficient to cause much real hardship, and the people will easily recover from their losses if nothing abnormal occurs during the current year. Sanction was given to the starting of small relief works, and to the issue of loans under Act XII of 1884; but as a matter of fact it was found unnecessary to start the proposed relief works, and the total loans issued up to the close of the year amounted only to Rs. 30. In parts of the Kámrúp district in the Assam Valley a certain amount of damage was caused by high floods in August, but the area affected by them was very small.

V.—AGRICULTURAL EXPERIMENTS.

Crop experiments.

29. The annual Note on the crop experiments carried out during the year was submitted to the Chief Commissioner with my letter No. 2754, dated the 11th June 1894. The rules for conducting crop experiments and the forms for recording the results of the same have been revised and consolidated in this office Circular No. 6, dated the 26th April 1894.

30. I visited the small Government plantation of Malta oranges, lemons, and citrons near Theriághát in November last, and found about 16 out of the total number of trees (130, excluding saplings) bearing fruit. The plantation was sufficiently fenced, and appeared to have been well looked after. A sum of Rs. 4-8 was spent during the year in keeping the ground clear of weeds. A few citrons were sold, but the price realized was trifling.

Citron plantation.

31. As noticed in paragraph 32 of the report for the year 1892-93, Babu Nritya Gopal Mukerji, Assistant to the Director of Land Records and Agriculture, Bengal, forwarded some seed of the *eri* silkworm to Mr. Rita, Subdivisional Officer, Jowai, for experiment in his subdivision. The result was a complete failure, owing, it appears, to the want of adequate knowledge on the part of the persons to whom the seed was distributed.

Silk experiments.

32. In addition to the two consignments of *eri* worms sent to the Government of Queensland in 1892-93 (*vide* paragraph 33 of the report for that year), a further supply of the same worms was despatched in October 1893. Three consignments of *muga* worms for the same Government were despatched in September, October, and November last.

Supply of silk cocoons to other countries.

Mr. F. W. Tytler, Superintendent of the Railway Mail Service, General Post-Office, Madras, and Mr. John Ruston, of Nottinghamshire, England, having applied for some cocoons of the *deo muga* silkworm, the Deputy Commissioner of Sibságar at my request despatched 290 cocoons to the former in December 1893, and 37 to the latter in March 1894.

An application was received from a gentleman resident in Bermuda for some eggs of the *eri* silkworm, but it was explained to him that these eggs hatched out in from seven to fifteen days, and that it would, therefore, be useless to attempt to send them such a distance.

33. In January 1893, half a maund of seed potatoes was sent from the Khási and Jaintia Hills to the Superintendent of the Tura Jail for experiment in the jail garden. The crop failed, owing, it was said, to late sowing. Another supply of 20 seers was, therefore, sent in October for a second trial. The potatoes reached the Superintendent in good condition and were sown at the proper time. But this crop also was a failure.

Potatoes.

Twenty maunds of seed potatoes and 20 seers of Indian corn have recently, at his own request, been supplied to Mr. A. A. Howell, Assistant Commissioner, Kohima, who has distributed them for experiment amongst some Nága, Kuki, and Gurkha cultivators in that district.

34. At the request of the Director of Land Records, North-Western Provinces, 8 pounds of seed of the Gáro Hills cotton, and 5½ pounds of that grown in the Khási and Jaintia Hills, were supplied to the Superintendent, Government Experimental Farm, Cawnpur. An application from the same officer for 20 seers of *báo dhán* was also complied with.

Cotton seed and paddy for North-Western Provinces.

35. The Director of Land Records, Bengal, having asked for some sugarcane cuttings, 400 tops of the *rangi* cane from Goálpára, and 740 tops of the *bogi* and 200 of the *moloha* varieties from Kámrúp, were supplied to him.

Sugarcane cuttings to Director of Land Records, Bengal.

36. In February 1893, the Director of Land Records, Burma, applied for a supply of Assam tea-seed, together with an account of the method of its cultivation. A maund of indigenous tea-seed was accordingly despatched to his address in November 1893, and he was referred to a list of publications on the subject of tea cultivation which was kindly furnished by the Indian Tea Association.

Tea-seed for Burma.

VI.—CATTLE.

37. The following statement compares the mortality of cattle as reported from the several districts of the province during the past two years :

Cattle disease.

District.	2 Rinderpest.		3 Foot-and-mouth disease.		4 Swelling of mouth and throat.		5 Diarrhœa, dysentery, and cholera.		6 Anthrax.		7 Catarrh.		8 Other diseases.		9 Total.		10 Estimated value of cattle.	
	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.
																	Rs.	Rs.
Cachar	..	20	..	..	..	209	..	859	..	..	..	..	..	30	....*	1,225	....*	42,875
Sylhet	5,140	7,254	1,932	1,557	4,922	2,102	7,410	12,849	..	..	322	690	11,227	14,163	30,953	38,620	3,34,278	4,01,231
Goálpára	1,196	264	1,198	2,176	1,026	2,177	2,658	5,104	311	20	895	497	411	9,263	11,678	19,747	58,390	1,12,888
Kámrup	6,763	3,733	18,127	1,851	..	..	18,853	12,631	..	..	..	..	13,797	10,501	57,540	37,216	2,89,908	2,65,40
Darrang	..	..	2,553	301	1,508	85	3,029	247	..	..	..	14	2,231	4,451	16,362	4,750	1,17,547	93,884
Nowgong	..	..	..	..	..	..	11,845	13,642	..	..	..	..	4,981	5,810	22,420	19,452	1,57,139	1,10,074
Sibságar	10,749	..	2,220	..	1,998	..	..	15,138	..	95	..	38	..	2,107	14,749	23,178	1,06,122	1,21,795
Lakhimpur	..	2,596	..	2,491	..	..	4,461	..	..	..	..	..	..	2,466	4,461	10,752	44,810	1,02,290
Nága Hills † ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	....	....	....
Khasi and Jaintia Hills ..	..	..	109	..	..	..	98	..	..	..	..	..	893	..	1,010	....	8,750	....
Gáro Hills	..	..	..	..	..	..	..	..	..	..	..	..	58	128	80	128	600	1,637
Total	23,848	14,817	24,211	30,899	8,454	6,623	60,441	60,230	311	178	917	1,147	34,245	49,233	184,299	152,97	12,63,009	11,21,077

* No statistics were furnished for 1892-93.

† The Deputy Commissioner is unable to furnish statistics.

‡ Statistics for 1893-94 not available. The Deputy Commissioner says that as no epidemic diseases made their appearance during the year, there was no special cause for keeping statistics.

In the Surma Valley, where the disease was prevalent chiefly during the rains, the mortality was higher than in 1892-93. In Goálpára, cattle disease prevailed throughout the year, the largest number of deaths having been reported from Salmára, Súkchár, Sidli, and Bijni. In the sadr subdivision of the Kámrúp district, disease assumed a virulent shape during the months of April, May and June, but the mortality was not so great as in the preceding year. The mortality was also less than last year in Darrang and Nowgong. In Sibságar, on the other hand, the year was marked by a very exceptional mortality, especially in the Majuli, where disease was very prevalent during the earlier months of 1893. There was a marked and fatal outbreak of rinderpest in June in the mauzas of Dhákuákhána and Goháingaon in the North Lakhimpur subdivision, and in August there was a good deal of foot-and-mouth disease in the neighbourhood of the subdivisional station. The outbreak in the Dibrugarh subdivision was of a somewhat sporadic nature. There were no epidemics amongst cattle in the Khási and Jaintia Hills, and statistics of the mortality in this district are not available. In the Gáro Hills, cattle disease prevailed in mauza No. VII for a short time, but no reliable information on the subject is obtainable.

The classification of the causes of death is very defective, but steps are being taken to improve it.

A good deal of the cattle disease in this province is attributable to the introduction of infection from Bengal. When I was touring in North Kámrúp, I passed several large herds of buffalo-calves which were being brought from Rangpur for sale in the Assam Valley ; these herds were badly infected, and as the diseased animals dropped off from the herd, they were left behind lying by the roadside, where they must have proved a fertile source of contamination to the cattle of the vicinity. The matter has been brought to the notice of the Deputy Commissioner, who is taking measures to remedy the evil as far as possible.

38. Of the two surviving Kenwári bulls, one remained at Sibságar throughout the year, and the other at Gunjong in the North Cachar Hills. The following statement gives details as to the cost of keep and work done by the bulls :

Breeding bulls.

District.	Wages of keeper	Cost of food.	Miscellaneous.	Total.	Number of successful coverings during 1893-94.*			Total for 1892-93.
					Male.	Female.	Total.	
	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.				
Cachar ...	22	64 11 8	.....	86 11 8	10	13	23	34
Sibságar ...	96	63 0 8	3 7 3	162 7 11	2	...	2	16

* No account was kept of the number of unsuccessful coverings.

The result is unsatisfactory. Both the animals are getting old, and at Sibságar the people are said to be averse to sending their cows to be covered by the Kenwári bull there, owing to the greater danger which is said to attend parturition and to the offspring of this bull requiring a larger quantity of milk than ordinary country calves. The sale of the bull stationed at Gunjong has been sanctioned, but no satisfactory bid has been made for it.

Four Kenwári bulls are maintained by private individuals in the Mangaldai subdivision, but no record was kept of their coverings. The number of living offsprings of these bulls is said to be 81.

VII.—AGRICULTURAL AND FISCAL STATISTICS.

Agricultural and fiscal statistics.

39. These are comprised in Return No. 41B., and are separately submitted every year. The instructions regarding the compilation of this return, which were revised in 1892-93, were further amended during the year under report, and have now been finally published under the Chief Commissioner's Circular No. 18R., dated the 27th April 1894.

VIII.—TRADE AND TRADE STATISTICS.

Trade Reports.

40. The Annual Report on the river-borne trade of the province was submitted in September 1893. Quarterly reports dealing with the same subject were also issued regularly. A permanent building for the Dhubri traffic registration office was built in December 1893, and the office has been located there since 1st January 1894; a proposal to move the Bhairab Bázár office to a more suitable site is still under consideration.

IX.—MISCELLANEOUS.

Miscellaneous.

41. The following subjects are noticed in this report, in accordance with the orders of the Government of India or the Local Government issued from time to time.

Fuel and fodder reserves.

42. The creation of fodder reserves or pastures is not a matter of much practical importance at present, as far as this province is concerned. It is, however, a matter for consideration whether it would not be desirable in specified areas, where the population is unusually dense, to mark off portions of the waste still remaining unoccupied, and reserve them as public grazing grounds. I have noted this matter for further enquiry during the next camping season.

Bones as manure.

43. As stated in last year's report, bones are never used in Assam as manure, except (rarely) by tea-planters, and there is no export or import trade worth mentioning in this commodity.

Locusts.

44. The appearance of locusts is happily rare in this province. No ravages of these insects were reported during the year under review.

Insect pests.

45. In April 1893, the Secretary to the Chief Commissioner forwarded to this office some copies of a conspectus of insect pests, together with a circular of the Government of India, Revenue and Agricultural Department, No. 7—13, dated the 14th February 1893, requesting that measures might be taken by this Department with a view to a continuous investigation into the subject. My predecessor, in distributing the conspectus and the circular amongst district officers and some of the leading tea-planters, requested that any information on the subject might be communicated to this office.

As a step towards promoting the desired object, the Assam Branch of the Tea Association have decided to offer a prize of Rs. 500 for the best essay on the subject of tea blight. This prize has been increased by a grant of Rs. 250 from provincial revenues, and the Committee of the Calcutta Tea Association have offered another prize of Rs. 250 for the second best essay on the subject. It has been arranged that the officer of the Indian Museum entrusted with entomological work will *undertake* the examination of the essays. To clear the ground, this officer has lately been engaged in compiling all existing information on the subject, and the conditions on which the prizes will be offered will not be finally settled until the compilation in question is published.

In pursuance of the circular of the Government of India quoted above, some specimens of insects attacking crops in this province have been forwarded, from time to time, to the Deputy Superintendent, Indian Museum, and the results of his examinations have been noted. It seems doubtful, however, whether any satisfactory results will be attained until a practical entomologist is appointed, who could make a study of the life history of the different insect pests and furnish useful suggestions with a view to their destruction.

State patronage of Muhammadans.

46. With the exception of one Sub-Deputy Collector, who was deputed for a short time to the Jaintia Settlement Office, there was no Muhammadan in superior service under this Department during the year.

Rainfall registration.

47. The supervision of rainfall registration was carried on as usual, and weekly and monthly returns were published in the local Gazette. Printed copies of the latter were forwarded to the Meteorological Reporter to the Government of India.

The total number of stations at the close of the year was 97 (45 under Government management and 52 maintained by tea-planters), against 94 in the preceding year. The three new stations added are Sephinjuri bheel in Sylhet, Dámra in Goálpára, and the North Lushai Hills station. All the stations are provided with the necessary instruments. Appendix J gives details as to the number of stations in each district and the instruments supplied to them. One copy of the local Gazette is sent gratis to each non-official who furnishes rainfall statistics.

Inspection of rain-gauges.

48. The following statement shows the number of rain-gauges that were inspected by the Deputy Commissioners, Subdivisional Officers and Civil Surgeons during the year:

District.	Total number of rain-gauges.	Number of inspections.			Number of gauges inspected more than once.	Number of different gauges inspected.	Number of gauges not inspected.
		By Deputy Commissioners, Subdivisional officers and others.	By Civil Surgeons.	Total.			
Cachar	10	...	1	1	...	1	9
Sylhet	12	...	...	...	...	...	12
Goálpára	6	...	...	...	...	...	6
Kámrúp	16	...	...	...	...	...	16
Darrang	12	...	...	...	...	...	12
Nowgong	7	...	6	6	1	5	2
Sibságar	11	3	1	4	...	4	7
Lakhimpur	12	3	...	3	...	3	9
Nága Hills	5	1	...	1	...	1	4
Khási and Jaintia Hills ...	3	6	1	7	1	2	1
Gáro Hills	1	...	...	...	...	...	1
Manipur	1	...	...	...	...	...	1
North Lushai Hills	1	...	1	1	...	1	...
Total	97	13	10	23	2	17	80

The inspection of rain-gauges has received little or no attention in the districts of Sylhet, Goálpára, Kámrúp, and Darrang.

Agricultural implements.

49. The consolidated list of agricultural implements of Assam referred to in paragraph 49 of the report for 1892-93, together with the illustrative drawings and photographs, was submitted during the year under report.

Economic products for the Imperial Institute.

50. Under the orders of the Government of India quoted in paragraph 50 of the previous year's report, a sum of Rs. 500 is annually included in the budget of this Department for expenditure on the purchase of specimens, the institution of enquiries, and other similar objects connected with the Imperial Institute, London.

The greater part of the allotment for the year under review has been utilized in the purchase of dyed and printed cotton, silk, and woollen yarns, cloths, &c., to illustrate as far as possible the industry as carried out in this province.

Expenditure.

51. The following statement gives details as to the expenditure incurred by this department during the year, and compares the figures with those of the previous year :

Year.	Director's head office.	Settlement Offices.	Survey schools.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1892-93	29,965 3 1	47,719 1 3	1,487 9 3	79,171 13 7
1893-94	39,060 9 10*	71,193 9 8†	1,895 13 6	1,12,150 1 0

* This includes—

	Rs. a. p.
(a) Sadr office charges	29,296 9 7
(b) Superintendent, Land Records ...	8,646 8 1
(c) Experimental cultivation ...	186 8 6
(d) Veterinary charges	249 3 7
(e) Raingauges	176 12 1
(f) Economic collections... ...	505 0 0
Total	39,060 9 10

† This includes—

	Rs. a. p.
(a) Cost under *ilám* settlement ...	992 13 6
(b) Cost of Assam Valley Settlement Office	15,153 3 4
(c) „ Pratabgarh „ ...	942 14 6
(d) „ Jaintia „ ...	30,253 12 0
(e) „ Cachar „ ...	2,478 10 6
(f) Prisms	9,589 4 6‡
(g) Concrete blocks	11,782 15 4‡
Total ...	71,193 9 8

‡ This expenditure is recoverable from the settlement holders.

The increase in expenditure under the first head is due mainly to the appointment of a Superintendent of Land Records ; that on Settlement Offices to the Jaintia Settlement Office being open throughout the year, to the starting of the Cachar Office, and to larger advances for survey marks (prisms, concrete blocks, &c.). The increase under "Survey schools" is due to the school at Dibrugarh having remained open for the whole year.

In addition to the items given above, a sum of Rs. 1,11,269 was expended under the head "Kánungo establishment," against Rs. 97,167 in 1892-93. The increase is mainly due to the appointment of new supervisor kánungos in the area cadastrally surveyed in 1891-92, to promotions of mandals to fill vacancies in the higher grades, and to the charges on account of instruments for extension survey and rewards granted to the kánungos and mandals employed on that work.

SHILLONG,
The 30th June 1894.

E. A. GAIT,
Director, Department of Land Records and Agriculture, Assam.

APPENDIXES.

APPENDIX A.

Diary Statement of Sub-Deputy Collectors for the year 1893-94.

Name of Sub-Deputy Collector.	District.	Subdivision.	Number of days in charge.	Number of days on tour.										Number of days at office work.	Number of days without work.						Remarks.
				In cadastral mauzas.					In non-cadastral mauzas												
				Running chain-lines.	Testing camps.	Examining mamlah' papers.	Enquiring into cases.	Miscellaneous work, inspecting chaukidár stations, &c.	Testing measurements.	Examining mamlah' papers.	Enquiring into cases.	Miscellaneous work.	Total.		Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half pay.	Leave without pay.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Babu Purna Chandra Mitra ..	Sylhet ..	Karimganj ..	365	22	....	....	37	53	....	....	19	13	154	181	16	14	....	....	....	....	30	
„ Jajneswar Dás Gupta ..	Goálpára ..	Dhubri ..	163	..	....	....	....	..	7	4	8	14	36	97	15	18	3	....	....	....	36	
„ Párbati Sankar Kar ..	Kámrúp ..	Barpeta ..	271	30	....	43	26	31	....	....	....	..	129	112	14	15	1	....	....	....	30	
„ Bholá Náth Dás ..	„ ..	Sadr ..	365	62	1	24	4	49	....	....	5	3	149	161	1	26	2	27	....	....	55	
„ Jogeswar Barkataki ..	Darrang ..	Mangaldai ..	30	....	....	....	....	....	....	....	....	....	....	30	....	....	....	....	....	....	....	
„ Ratnadhar Barua ..	Goálpára ..	Dhubri ..	49	....	....	....	....	....	....	....	....	6	6	24	6	4	....	....	....	....	10	There was no Sub-Deputy Collector at Dhubri from 11th May 1893 to 2nd August 1893.
	Darrang ..	Mangaldai ..	29	....	....	....	....	7	....	....	....	4	11	28	....	....	....	....	....	....	....	
„ Harendra Kumár Ghose ..	„ ..	„ ..	236*	37	....	23	13	59	....	....	....	....	132	62	15	13	....	....	....	....	29	
„ Krishna Chandra Chandhuri ..	„ ..	Tezpur ..	365	36	....	25	20	18	12	5	3	4	123	218	....	26	1	2	....	....	29	
„ Lakshmi Náth Kákati ..	Nowgong ..	Nowgong ..	365	64	4	27	8	55	1	....	....	....	159	186	3	13	4	....	....	....	20	
Munshi Didar Uddin Borah ..	Sibságar ..	Golághát ..	365	66	1	11	11	56	2	1	....	1	129	168	26	2	....	30	....	....	58	
Babu Rádhá Kánta Bándiqui ..	„ ..	Jorhát ..	365	26	5	27	27	43	....	....	....	....	128	193	8	30	1	....	....	....	39	
„ Phanidhar Chaliha ..	„ ..	Sadr ..	365	27	7	21	41	31	6	2	....	....	134	210	2	19	....	....	....	....	21	
„ Rajani Kánta Bardalai ..	Lakhimpur ..	North Lakhimpur ..	365	19	6	....	65	46	24	....	3	23	186	154	28	8	11	....	....	....	45	
Munshi Mansiat Ullah ..	„ ..	Dibrugarh ..	365	13	....	8	19	....	64	4	6	3	167	171	6	19	3	....	....	....	37	

Details for 7 days not furnished.

APPENDIX B

Diary Statement of Supervisor Kánungos for the year 1893-94.

Name of supervisor kánungo.	Name of circle.	District.	Sub-division.	Number of days in charge.	Number of days on tour.										Number of days at office work.	Number of days without work.							Remarks.
					In cadastral mauzas.					In non-cadastral mauzas.													
					Running check-lines.	Testing crops.	Examining mandals' papers.	Inputting into cess s.	Miscellaneous, as wk. temp ciking Chowkidar statistics, &c.	Testing measurements.	Examining mandals' papers.	Inputting into cesses.	Miscellaneous work.	Total.		Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half pay.	Leave without pay.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Radha Govinda Bhanmik*	Singla Valley ..	Sylhet	Karimganj ..	305	..	..	..	30	145	..	..	..	..	175	174	2	14	..	..	..	..	16	* These two men are at present muharrir employed in Pratabgarh. Proj o ira Kisor appointed 1st Sep., 1894, †Transferred to Golaghat.
Brajendra Kisor Dás*	Langai ,, ..	,, ,, ..	,, ..	212	..	..	..	12	132	..	..	..	..	144	47	7	14	..	..	..	..	21	
Monirám Talukdár†	Baltola	Kamrup	Sadr	45	5	..	3	19	3	..	..	..	2	29	8	6	..	1	..	..	..	7	
Dhaneswar	,, ,, ..	,, ,, ..	,, ..	173	6	1	13	3	4	..	2	1	5	41	91	21	..	5	32	..	..	41	
Nityánanda	,, ,, ..	,, ,, ..	,, ..	143	35	8	34	3	20	..	..	..	..	101	32	11	..	4	..	..	..	15	
Ganga Ram Das	Palásbari	,, ,, ..	,, ..	24	5	3	..	1	4	..	..	..	7	20	8	4	2	..	..	..	..	6	Transferred to Tezpur.
Mantán Das	,, ,, ..	,, ,, ..	,, ..	331	56	13	61	4	87	..	..	..	34	195	99	32	6	9	..	..	..	47	
Kátí Rám, Offg.	Boko	,, ,, ..	,, ..	196	30	11	29	..	7	..	..	..	..	86	55	15	..	..	..	..	..	15	
Mádhi Rám Das	,, ,, ..	,, ,, ..	,, ..	209	91	15	59	3	15	1	1	..	..	235	40	11	..	14	20	..	..	85	
Molán Chandra Bora	Fatidarrang ..	,, ,, ..	,, ..	283	86	11	27	46	14	26	17	4	19	225	1.0	7	..	..	13	..	..	20	
Jajna Rám	Hajo	,, ,, ..	,, ..	21	..	..	..	3	2	..	..	..	..	5	14	2	..	..	..	..	..	2	
Laguna Rám	,, ,, ..	,, ,, ..	,, ..	256	20	2	3	3	7	84	..	..	..	124	129	4	1	2	..	..	..	7	
	Barkhetri	,, ,, ..	,, ..	109	22	1	2	9	1..	..	..	..	..	45	...	1	..	..	..	..	..	1	
Jiu Rám	,, ,, ..	,, ,, ..	,, ..	236	61	4	..	3	14	..	..	..	..	82	135	2	..	2	15	..	..	14	
	Hajo	,, ,, ..	,, ..	83	26	22	..	16	14	..	..	..	..	78	10	..	..	..	..	..	..	..	
Jagannáth	Barigog	,, ,, ..	,, ..	71	48	..	..	10	3	..	..	..	..	61	4	..	2	3	..	..	..	5	Transferred to Lakhimpur.
Tika Rám Dutt	,, ,, ..	,, ,, ..	,, ..	220	18	12	..	12	11	..	..	..	..	60	187	9	3	1	..	..	..	13	
Patu Rám ,, ..	,, ,, ..	,, ,, ..	,, ..	45	13	9	..	..	..	..	..	..	..	22	19	4	..	..	..	..	..	4	
Kan Nath	Panduri	,, ,, ..	,, ..	325	93	8	15	2	33	..	..	..	..	151	157	15	4	8	..	..	..	27	
Patu Rám, Offg. ..	,, ..	,, ..	,, ..	31	..	..	..	..	..	..	..	..	..	..	30	..	..	..	..	..	..	..	
Lakshmi Kanta Bora	Nalbári.																						

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Bâti Râm, Offg.	..	..	..	"	..	..	"	..	..	"	..	..	53	4	..	..	8	17	..	..	..	..	29	14	9	..	..	..	..	..	9	
Rangdev Barua	..	..	..	"	..	..	"	..	..	"	..	..	308	14	17	57	21	11	..	..	..	..	126	138	26	..	6	..	..	..	33	
Dilir Singh Deka	..	..	..	Tamulpur	..	"	..	"	..	"	..	..	325	103	19	12	2	17	16	7	..	5	180	174	3	5	2	..	..	..	1	
Kshirod Das	..	..	..	Baksara	..	"	..	"	..	"	..	..	72	16	20	..	3	6	..	..	..	..	44	16	6	2	4	..	..	..	13	Transferred to Mangaldai.
Madhab Ram Gagoi	..	..	..	"	..	"	..	"	..	"	..	..	295	23	6	1	18	24	..	..	..	..	79	185	24	4	1	..	..	..	29	
Mináram Das	..	..	..	Bajali	..	"	..	"	..	Barpeta	..	..	33	31	..	..	..	..	..	..	..	..	31	2	..	2	..	..	..	..	2	
Shâhabuddin Ahmed	..	..	..	"	..	"	..	"	..	"	..	..	3	109	2	..	31	10	..	..	..	..	158	151	..	3	..	..	..	..	3	
Bashr Ali Biswas	..	..	..	Barpeta	..	"	..	"	..	"	..	..	305	101	12	..	24	62	..	..	..	..	201	142	..	13	..	7	..	..	22	
Bhagiruth Deka	..	..	..	Raha	..	"	..	"	..	"	..	..	305	116	12	4	24	32	2	..	1	1	212	110	5	..	10	20	..	..	43	
Kalamati Das	..	..	..	Mangaldai	..	Darrang	..	..	Mangaldai	..	..	..	20	27	"	13	26	17	..	..	..	..	8	96	5	14	4	..	..	..	14	
Maniram Koot	..	..	..	"	..	"	..	"	..	"	..	..	3	11	7	6	15	45	..	..	..	..	79	5	..	..	..	..	..	..	..	Papers containing the details of 182 days were burnt down in the supervisor kanungo's house at Kalaigaon tahsil.
Jugeshar Sabaria	..	..	..	Kalaigaon	..	"	..	"	..	"	..	..	267	38	1	6	..	61					94	48	2	2	..	..	..	..	25	
Chandra Kanta Sirkar	..	..	..	Tezpur	..	"	..	"	..	"	..	..	340	72	7	113	2	28	..	..	..	..	231	8	18	..	2	..	..	..	20	Four days without work on account of relics.
Rammal Das	..	..	..	Bengtari	..	"	..	"	..	"	..	..	340	69	10	71	7	47	..	..	..	..	41	117	22	1	..	..	..	..	38	Two days ditto.
Durga Saru Datta	..	..	..	Tezpur, Western	..	"	..	Tezpur	..	"	..	..	341	42	23	..	..	70	..	..	..	..	136	149	1	34	..	1	..	..	43	
Gangaram Das	..	..	..	Tezpur, Eastern	..	"	..	"	..	"	..	..	340	96	8	4	4	22					169	132	1	8	3	2	..		14	
Rabe wan Das	..	..	..	Tezpur	..	Nowgong	..	Nowgong	..	"	..	..	345	11	8	2	1	70	..	..	..	..	169	202	1	1	1	..	..	..	3	
Ramratan Datta	..	..	..	Silghat	..	"	..	"	..	"	..	..	2	69	11	..	17	36	..	..	2	..	126	189	5	1	6	..	..	..	9	
Jairam Das	..	..	..	Dabaka	..	"	..	"	..	"	..	..	305	67	8	15	4	77	1	4	3	..	159	199	5	2	..	..	..	..	4	
Sibnath Sarma	..	..	..	Raha	..	"	..	"	..	"	..	..	26	7	11	14	17	..	1	1	..	4	27	14	..	..	2	..	..	..	1	
Gunanath Deka	..	..	..	Dhing	..	"	..	"	..	"	..	..	305	61	15	2	21	59	..	..	..	..	172	138	5	17	32	..	..	..	56	
Govir Iram Dutt	..	..	..	Gerua	..	"	..	"	..	"	..	..	20	77	5	9	..	13	..	..	..	..	12	127	8	14	..	1	..	..	10	
Lakshmi Kanta Das	..	..	..	Dhuphm	..	"	..	"	..	"	..	..	305	78	"	48	2	103	..	..	..	..	234	103	5	14	..	9	..	..	25	
Sib hanath Sarma	..	..	..	Mayang	..	"	..	"	..	"	..	..	25	..	..	..	..	..	..	..	..	..	..	28	..	..	..	..	..	..	..	
Jagid Baro, Offg.	..	..	..	"	..	"	..	"	..	"	..	..	210	9	..	17	..	29	..	..	1	..	53	121	4	27	1	..	..	..	16	
Tilakram Gohain	..	..	..	"	..	"	..	"	..	"	..	..	14	40	31	2	..	8	..	..	..	..	101	2	..	2	..	..	..	..	11	
Maheswar Das	..	..	North-Lakhimpur	..	Sibsagar	..	Golaghat	..	..	..	..	..	87	31	..	..	1	"	..	..	..	..	19	..	..	..	..	..	..	..	..	
Manuram Tarok Dutt	..	..	..	"	..	"	..	"	..	"	..	..	190	5.	..	..	27	16	..	..	..	..	31	231	..	1	..	..	..	..	..	
Purnam Mahanta	..	..	Southern	..	"	..	"	..	"	..	..	..	267	55	54	10	18	44	..	..	..	..	14	18	5	11	6	..	..	..	14	
Nanda Kumar Saha	..	..	Eastern	..	"	..	"	..	Jorhat	..	..	..	242	7	..	..	15	6	..	..	1	..	27	194	..	17	..	..	..	..	17	
Mahiram Das (pensioner)	..	..	"	..	"	..	"	..	"	..	..	..	12	10	1	1	7	18	..	..	..	..	4	4	..	..	2	..	..	..	7	3 days 40 days engaged in extension work.
Dânjari Das	..	..	Sibsagar	..	"	..	"	..	"	..	..	..	181	6	..	6	15	4	..	..	..	..	81	173	8	2	22	..	1	40		
Kaliram Das	..	..	"	..	"	..	"	..	"	..	..	..	17	18	4	..	1	14	..	..	..	..	4	47	1	..	..	..	..	..	11	
Durga Ram Datta	..	..	North-Western	..	"	..	"	..	"	..	..	..	46	6	..	..	28	8	..	..	..	8	42	2	1	1	..	..	..	..	2	
Mahiram Das Senior	..	..	"	..	"	..	"	..	"	..	..	..	278	14	13	..	78	729	1	..	..	..	13	176	1	1	..	..	..	..	4	† Including 66 days in extension work.

APPENDIX B—*concluded.*

Name of supervisor kanungo.	Name of circle.	District.	Subdivision.	Number of days in charge.	Number of days on tour.										Number of days at office work.	Number of days without work.						Remarks.
					In cadastral measures.					In non-cadastral measures.												
					Running check-lines.	Trading crops.	Examining mauzá papers.	Inspecting fake cases.	Miscellaneous work, inspecting thanas, &c.	Total.	Testing measurements.	Examining mauzás' papers.	Remitting into cases.	Miscellaneous work.	Total.		Travelling from place to place.	Gazetted holidays.	Sundays.	Privileged leave.	Leave on half pay.	Leave without pay.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mánirám Dás	Májuli	Sibsagar	Jorhat	316	88	13	8	2	7	..	..	2	..	120	145	33	3	18	..	..	..	51	
Shibrám Bora	Eastern	„	Sadr	353	38	..	12	11	16	2	1	..	62	142	208	..	2	1	..	..	..	3	
Mihiraddin Bora	Central	„	„	362	11	14	37	40	89	..	..	..	..	191	156	..	8	..	10	..	..	18	
Lakshmi Kánta Dás	Western	„	„	48	14	..	..	8	16	..	..	..	..	38	9	..	1	..	..	..	..	1	
Lalitrám Chaudhuri	„	„	„	317	37	7	7	33	25	..	..	..	..	109	182	..	15	11	..	..	..	26	
Jagannáth Deka	North Lakhimpur ..	Lakhimpur ..	North Lakhimpur ..	286	147	9	..	11	17	..	..	..	..	184	96	6	..	..	..	..	..	6	
Maheswar Dás	Dibrugarh ..	„	Dibrugarh ..	300	22	16	14	18	38	..	..	..	..	108	158	2	31	3	..	..	..	36	
Lakshmi Kánta Dás	Chabua ..	„	„	314	18	17	62	8	34	7	..	2	2	150	133	4	27	..	..	..	..	31	

APPENDIX C.

Work Statement of District and Subdivisional Officers for the year 1893-94.

Name of officer.	District.	Subdivision.	Area cadastrally surveyed.														Area not cadastrally surveyed.								Area found wrongly classified.			Remarks
			Number of supervisor Kanungos whose work was inspected.	Number of villages tested.	Number of mandals.			Testing by chain-lines.				Testing by check-lines.			Testing without check-lines.		Number of mandals.							Area of cultivated cultivation thrown out.	Area of uncultivated cultivation thrown out.		
					Total number.	Whose papers examined.	Whose field work tested.	Number of lines.	Number of lines.	Number of offsets.	Length of lines in miles.	Area of fair-sailing cultivation in square miles.	Number of lines taken to compare fair-sailing cultivation.	Number of fields tested.	Area, including roads, in acres.	Number of villages.	Total number.	Whose papers examined.	Where field work tested.	Total area as shown by measurement.	Percentage of error.			Kept as shown as	Forfeited.	Kept shown as forfeited.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
																				Acres.			Acres.	Acres.	Acres.	Acres.	
G. Gordon, Esq., Deputy Commissioner.	Goalpara	Dhubri	..	..	..	..	..	..	..	..	....	....	....	..	..	4	75	3	3	107	11·5	0·93	2	..	..	..	
Bábu Mádhav Chandra Bardaloi, Subdivisional Officer.	Kámrúp	Barpeta	..	1	5	52	5	5	10	67	62	2·68	24,035	0·09	..	3	17	3	3	240	24·1	0·41	6	..	..	..	
.....	,,	Sadr	..	..	..	198	..	..	..	..	..	....	45,339	....	..	..	33	..	..	..	..	....	..	..	..	..	
H. E. Ransom, Esq., Subdivisional Officer.	Darrang	Mangaldai	..	..	5	77	..	3	3	44	63	1·94		0·08	..	..	..	..	..	..	..	....	..	..	..	..	
Lieut. A. A. Howell	,,	,,	..	..	..	..	33	..	..	..	..	....	14,146	....	..	..	6	6	..	..	..	....	..	..	..	..	
Babu Akshay Kumár Chatterji.	,,	,,	..	..	1	..	6	1	1	7	12	0·29		0·01	..	2	..	3	2	55	36	1·81	..	..	..	..	
.....	,,	Tezpur	..	..	..	19	..	..	..	..	..	....	4,499	....	..	..	21	..	..	..	..	....	..	..	..	..	
.....	Nowgong	Nowgong	..	..	..	161	..	..	..	..	..	....	28,787	....	..	..	15	..	..	..	..	....	..	..	..	..	
.....	Sibságar	Golághát	..	..	..	47	..	..	..	..	..	....	6,349	....	..	..	4	..	..	..	..	....	..	..	..	..	
W. A. M. Duncan, Esq., Assistant Commissioner.	,,	Jorhát	..	2	4	..	..	4	4	39	52	1·30	9,353	0·18	.. 21	23	..	6	..	..	..	....	..	..	..	..	
			..	4	14	78	51	14	7	17	55	1·12					..	..	..	..	..	..	..	..	..	..	
C. W. E. Pittar, Esq., Deputy Commissioner.	,,	Sadr	..	..	6	68	20	6	9	62	74	2·81	14,667	0·14	..	..	1	..	1	4	3	0·25	..	..	..	..	
			..	..	..	..	..	1	3	12	6	0·50			..	..	4	..	..	..	..	....	..	..	..	..	
W. B. Brown, Esq., Subdivisional Officer.	Lakhimpur	North Lakhimpur.	..	..	3	19	..	3	3	42	42	1·12	1,922	0·07	..	..	3	14	..	3	106	10·8	1·88	..	..	..	
Moulvi Azizar Rahmán, Extra Assistant Commissioner.	,,	Dibrugarh	..	..	..	27	..	..	..	..	..	....	1,845	....	..	..	1	8	..	1	6	3·0	3·50	..	..	..	
Total	.....	.....	1	36	744	115	37	64	264	567	1,217	149,285	0·56	23	23	74	213	15	13	819	327	1·74	8	..	..	..	

* Exclusive of 6 of Ahutguri.

† Inclusive of 6 of Ahutguri.

Tested in connection with the extension survey.

Extension survey.

APPENDIX D.

Work Statement of Sub-Deputy Collectors for the year 1893-94.

Name of Sub-Deputy Collector.	District.	Sub-division.	Area cadastrally surveyed.												Area not cadastrally surveyed.								Area from I wrongly classified.			Remarks
			Number of mauzahs.			Testing by check-lines.					Testing without check-lines.		Number of mauzahs.										Basti shown as			
			Number of villages tested.	Total number.	Whose papers examined.	Whose field work tested.	Number of lines.	Number of kanoos	Number of offsets	Length of lines, in miles.	Area affected each village by testing lines per square mile.	Number of fields tested.	Area, including pasture, in acres.	Number of villages.	Total number.	Whose papers examined.	Whose field work tested.	Total area as shown by zamindar.	Total area as shown by measurement.	Percentage of error.	Area of encroachments discovered.	cultivation	Rayat.	Fee-simple.	Pogut shown as portagan.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
Babu Purna Chandra Misra ..	Sylhet ..	Karimganj	47	2-	2	2	42	382	123	2·27	..	....	....	....	..	..	..	..	....	....	....	....	..	..	..	* These are settlement mahaurries of Patakbarah, where there are no mauzahs.
„ Jajneswar Das Gupta ..	„	Beanibazar ..	Dhubri ..	..	..	..	..	..	....	....	..	....	....	....	7	35	4	4	248	252	1·59	....	..	1	..	
„ Parbati Sankar Kar ..	„	Kamrup ..	Barpeta ..	37	82	43	36	61	595	698	21·25	21,095	0·67	....	....	..	17	17	..	....	....	....	....	..	..	..	
„ Bhola Nath Das ..	„	.. ..	Nalbari ..	102	193	149	88	132	1,852	2,001	54·66	43,289	0·82	84	7-	3	..	..	....	....	....	....	....	..	..	..	
„ Jogeswar Barkataki ..	„	Darrang ..	Mangaldai ..	..	..	..	..	..	.....	.....	....*	..	.....	....	....	..	..	..	....	....	....	....	....	..	..	..	
„ Ratnadhar Baroa ..	„	„ ..	„ ..	..	..	..	..	..	....	....	....	..	....	....	....	..	..	..	....	....	....	....	....	..	..	..	
„ Harendra Kumar Ghose ..	„	„ ..	„ ..	18	77	77	13	38	254	300	13·20	14,515	0·95	29	....	..	6	..	..	....	....	....	....	..	..	..	
„ Krishna Chandra Chaudhuri ..	„	„ ..	Tezpur ..	33	29	29	23	76	348	351	17·46	4,499	2·43	51	1·0	4	1	1	2	212	215	1·43	....	..	1	2	
„ Lakshminath Kakati ..	„	Nowgong ..	Nowgong ..	128	151	151	107	172	1,662	2,406	72·44	20,787	1·73	746	1,1 9	1	1-	1	1	28	29	3·45	1	..	..	..	
Munchi Bidar Uddin Borah ..	„	Sibsagar ..	Golaghat ..	{ 42	417	47	30	17	98	98	9·22	6,549	2·23	455	1,2-2	2	4	4	2	28	2-	..	2·	..	..	..	† Exclusive of 6 of Alintauri.
			{ 29	..	..	7	122	172	187	10·89		....	....	..	..	..	..	..	....	....	....	....	..	..	..	‡ In connection with extension survey.
			{ 25	782	38	22	37	130	377	6·17	3,125	0·88	22	17	..	6	..	..	....	....	....	....	..	..	..	§ Include 100 lines, 34 kanoos and 34 offsets in the area surveyed by the sub-deputy Collector himself.
			{ 2	..	..	2	37	....	....	3·65	..	....	....	..	..	..	..	..	....	....	....	....	..	..	..	‖ Inclusive of 6 of Alintauri.
Babu Radha Kanta Handiqui ..	..	..	Jorhat ..	127	96	86	43	4-	146	471	17·85	14,667	0·75	136	4·2	..	4	4	..	96	103	4·73	3	..	..	..	¶ Extension survey.
„ Pramathar Chaliha ..	..	..	Sadr ..	127	96	86	43	4-	146	471	17·85	14,667	0·75	136	4·2	..	4	4	..	96	103	4·73	3	..	..	..	
„ Ramkanta Barsisai ..	..	Lakhimpur	North Lakhimpur.	25	19	19	14	127	428	468	16·37	1,922	3·45	1,275	1,2-4	28	14	14	7	1 523	1 582	3·73	6	..	..	..	
Munshi Masalar Ullah ..	..	..	Dibrugarh	15	27	27	7	34	122	171	8·0	1 847	1·94	17	6	..	..	..	1	1 711	1 7 6	2·49	8	..	..	..	
Total	..	....	....	643	746	645	388	919	6,118	8,018	261·03	149,283	1·12	1,0·2	1,68-	41	213	1 0	46	3 946	4,086	3·76	38	..	2	2	

APPENDIX E.

Work Statement of Supervisor Kánungos for the year 1893-94.

Name of supervisor kanungo.	Circle.	District.	Subdivision.	Area cadastrally surveyed. Number of villages.	Testing by checking. Total number.	Testing by checking. Why-e-pelapse examined.	Testing by checking. Why-e-thal work tested.	Number of lines.	Number of factors.	Number of offsets.	Lot with of line, in miles.	Area of thoroughly cultivated in jurisdiction, in acres.	Number of miles per square mile of first rating cultivation.	Testing without checking. Number of fields test. l.	Area, for binding pages, in acres	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Rádhá Govinda Bhanmik	Sylhet Valley ..	Sylhet ...	Karimganj..	36	The entire area of the Pargana is cadastrally surveyed. Each of the three subdivisions is in charge of a separate supervisor kánungo. The Karimganj subdivision, which is the largest, was surveyed 2,421 square miles in area, and Brahmanbaria Khas 2,165 square miles, during the year, and their work was tested by the Subdivisional Officers, as follows:-											
Manu Bán Das ..	Beltola ..	Kámrúp ..	Gauhati ..	12		7	7	8	59	78	1·82			140	150	
Dhanapati Das ..	„ ..	„ ..	„ ..	20	6	7	7	7	41	91	2·71	1,158	2·81	349	437	
Nityánándha Das ..	„ ..	„ ..	„ ..	52		7	5	11	69	77	2·09			632	553	
								10	147	187	4·31	..	..	..	..	In connection with extension of survey (a).
Gangá Rám Das ..	Palásbari ..	„ ..	„ ..	6	20	..	..	16	20	43	2·32	6,178	1·94	361	617	
Mantán Rám Das ..	„ ..	„ ..	„ ..	127		20	25	18	146	292	17·14			948	2,457	
								1	19	18	1·84	..	..	..	..	(a)
Kati Rám Das ..	Doko ..	„ ..	„ ..	170	23	23	23	128	184	1,12	11·3	9,923	3·71	689	325	
Mágbi Rám Das ..	„ ..	„ ..	„ ..	120				37	304	978	16·61			1,518	324	
								3	15	9	0·16	..	..	..	..	(a)
Maláa Chandra Dás ..	Pathár-kuchi ..	„ ..	„ ..	148	21	23	21	18	181	11	7·11	1,750	1·18	5,493	3,189	(a) this line, length 41 miles, run in connection with extension of survey.
Laghnu Rám Das ..	Hábi ..	„ ..	„ ..	19	20	20	14	23	408	501	12·30	8,870	4·67	190	270	
Jiu Rám Das ..	„ ..	„ ..	„ ..	44		21	18	44	417	1,11	4·16			2,140	1,714	
Jiu Rám Das ..	Barkhetri ..	„ ..	„ ..	69	20	21	21	21	1,05	1,17	22·29	4,218	5·19	1,069	760	
Laghnu Rám Das ..	„ ..	„ ..	„ ..	20		16	16	36	419	647	15·10			406	925	
Jagga Náth ..	Darigaon..	„ ..	„ ..	98	14	..	14	14	413	413	11·87	3,773	1·68	8,92	2,283	
Tilá Ram Dutt ..	„ ..	„ ..	„ ..	52		14	14	41	371	647	11·61			2,084	1,455	
Fatu Ram, Offg. ..	„ ..	„ ..	„ ..	14		..	9	21	164	2·6	6·1			1,631	1,172	
Kanmáli ..	Pánduri ..	„ ..	„ ..	128	12	12	12	80	803	1,06	21·20	1,143	1·79	7,190	268	
Bátri Rám Das ..	Kalbári ..	„ ..	„ ..	10	19	..	..	16	1	87	3	1,344	3·72	311	155	
Rangdáli Barua ..	„ ..	„ ..	„ ..	40		19	19	25	170	276	7·55			226	745	
Dhir Sing ..	Tambulpur ..	„ ..	„ ..	13	18	16	16	147	612	1,04	57·31	4,192	10/ 3·49	2,259	3,344	(a) 57·02 miles, 20 miles run in connection with extension of survey.
Kalámati Das ..	Barama ..	„ ..	„ ..	26	18	..	10	34	308	309	14·31	4,121	3·7	1,572	1,895	
Mádhab Ram Gogái ..	„ ..	„ ..	„ ..	79		18	14	48	357	717	14·76			1,246	2,478	
Shálahuddin Ahamed ..	Rajoli ..	„ ..	Barpeta ..	33	21	..	16	36	55	515	25·0	5,115	4·11	872	1,945	
				9		9	9	115	281	109	16·23					
				13		5	5	13	192	138	8·01					
Mihiram Das ..	„ ..	„ ..	„ ..	8		7	7	52	314	410	12·40	5,115	2·36	372	620	
				80	26	21	13	227	1,427	1,728	67·11					
Basir Ali Biswas ..	Barpeta ..	„ ..	„ ..	8		5	5	86	189	267	21·94	12,024	3·46	..	..	In connection with extension survey.
Bhagiruth Deka ..	Reha ..	„ ..	„ ..	64	15	15	15	154	1,301	1,13	50·10	9,355	4·46	8,537	3,952	Extension survey.
				12		12	12	63	422	645	12·8					
Kalámati Das	Mangaldai ..	Darrang..	Mangaldai	194	15	18	9	61	433	515	2·80	1,696	7·54	68	240	
Mánirám Dás, (Offg.) ..	„ ..	„ ..	„ ..	104		18	9	9	123	102	0·10	1,696	1·18	856	379	
Jogendra Sáhária ..	Kaliagaon ..	„ ..	„ ..	246	22	22	14	70	422	779	29·50	4,114	4·29	164	1,722	
Chandra Kánta Sarkar ..	Sipájhár ..	„ ..	„ ..	145	22	22	22	182	1,377	2,640	78·10	5,606	7·42	189	2,673	
Dámmal Das ..	Bengbari ..	„ ..	„ ..	162	15	15	15	89	978	1,257	36·00	3 493	10·00	1,559	6,981	
Durgárám Dutt ..	Western..	„ ..	Tezpur ..	85	11	11	11	60	393	432	15·84	1,640	7·04	628	1,256	
Gangárám Das ..	Eastern ..	„ ..	„ ..	67	18	18	18	100	410	855	29·41	8,053	5·62	1,518	1,760	
Radhcharan Das ..	Town ..	Nowgong	Nowgong..	..	27	27	25	66	805	1,442	21·35	5,400·19	3·77	2,680	2,429·14	
Rámnath Dutt ..	Silghat ..	„ ..	„ ..	..	19	19	19	87	626	1,390	28·75	4,126·26	3·54	933	1,870·67	
Jairám ..	Doboka ..	„ ..	„ ..	..	16	16	16	122	757	1,132	47·22	2,445·95	4·26	4,592	4,969·06	

(a) In finding out the figures, linear miles in connection with extension of survey have been deducted from the figures in column 12.

APPENDIX E—*concluded*

Name of supervisor kanungo.	Circle.	District.	Subdivision.	Area cadastrally surveyed.													Remarks.
				Number of villages.	Number of mauzadis.			Testing by check-lines.							Testing without check-lines.		
					Total number.	Where papers examined.	Whose field work tested.	Number of lines.	Number of stations.	Number of offsets.	Length of line in miles.	Area of the existing cultivation in the selection, in acres.	Number of linear miles per square mile of the existing cultivation.	Number of fields tested.	Area, including jungle, in acres.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		17
Sridhánáth Sarma ..	Raha ..	Nowgong	Nowgong ..	..	22	22	22	119	1,282	1,037	66·18	3,146	11·28	427	309·58		
Gunanath Deka ..	Diding ..	,, ..	,, ..	..	21	21	21	100	1,574	2,418	99·10	6,151	7·08	1,057	1052·89		
Gobind Ram Dutt ..	Gorua ..	,, ..	,, ..	..	16	16	16	90	676	992	33·21	1,746	11·00	701	2113·38		Extension survey
								25	396	534	19·79	..	..	..	..		
Lakhiram Das ..	Ghugua ..	,, ..	,, ..	..	19	19	19	120	1,094	1,788	8·15	2,452	2·12	762	838·31		
								15	112	141	5·63	..	..	..	..		Extension survey.
Sheikh chi hahuddin (Offg.)	Mayang ..	,, ..	,, ..	..	..	..	..	..	..	..	..	..	..	..	..		
Jagat Sora (Offg.) Tita Ram Gogai	.. ..	,, ..	,, ..	11	4	3	15	137	266	5·32	1,324	4·05	178	344·42		
					7	6	30	206	245	9·17							
Maheswar Das ..	Northern	Nilbagar ..	Golaghat ..	10	14	4	60	29	1·31				945	573		In connection with the extension survey.
Manuram Talukdar ..	,, ,,	,, ..	,, ..	28	19	5	4	44	1·79	4,304	26	2,247	1,438				
				7	2	41	..	..	7·59			..	..		Ditto.		
Pituram Mahanta ..	Southern	,,	,, ..	84	23	21	26	147	152	6·82	1,976	2·15	5,445	6,767		
				7		2	51	124	111	11·92			..	..		Ditto.	
Nanda Kumar Saha ..	Eastern ..	,, ..	Jorhat ..	10	19	8	17	112	179	4·83	2,147	1·49	11	5		
Mahiram Das (minor) ..	,, ,,	,, ..	,, ..	10	19	8	9	31	54	2·00	2,147	8·32	15	7		In extension survey.
				2	..	2	2	22	32	1·06	..	..	..	..		Also cleared lines of 13 and made boundary survey of 10 villages.
Dasupati Das ..	Southe-Western	,, ..	,, ..	6	17	6	6	13	78	1·53	1,705	1·17	..	..		
Kaliram Das ..	,, ,,	,, ..	,, ..	14		17	13	37	185	2·85	7·90	1,345	3·61	91	65		
Durgaram Dutt ..	North-Western	,, ..	,, ..	6	23	5	5	11	58	7·1	3·14	1,117	1·42	..	..		
Mahi Ram Das (minor) ..	,, ,,	,, ..	,, ..	11		23	11	26	125	2·30	6·21	1,117	2·05	88	97		Also cleared lines of 18 and made boundary survey of 10 villages.
Minaram Das ..	Majuli ..	,, ..	,, ..	38	19	18	18	126	633	1,204	23·24	6,706	2·20	712	1,023		
Shib Ram Bora ..	Eastern ..	,, ..	Sadr ..	201	18	18	18	41	312	603	11·96	4,414	1·72	687	357		Extension survey.
				21		6	6	123	410	653	21·85	..	..	118	513		
Mihiruddin Dora ..	Central ..	,, ..	,, ..	2	16	16	16	29	87	114	1·43	2,064	0·44	522	345		
				4		4	5	32	70	3·33	..	..	..	..	..		Ditto.
Lalit Ram Chaudhuri ..	Western ..	,, ..	,, ..	12	22	21	14	215	361	7·04	7,917	0·63	103	91		
				2		1	8	84	55	2·66	..	..	37	75		Ditto.
Lakshmi Kanta Das ..	,, ,,	,, ..	,, ..	7		2	60	..	..	14·28	..	..	..	..		Ditto.
Jogannath Deka ..	North Lakhimpur	,, ..	North Lakhimpur ..	108	19	19	19	195	1,004	1,470	41·17	3,488	7·85	194	3,488		
Maheswar Das ..	Dibrugarh	Lakhimpur	Dibrugarh ..	78	14	14	14	46	378	271	17·63	695	16·42	1,531	1,170		
Lakshmi Kanta Das ..	Chabua ..	,, ..	,, ...	55	13	13	13	44	207	300	13·35	1,325	5·29	223	184		

APPENDIX F.

Work Statement of Tahsildárs for the year 1893-94.

tahsildár.	Name of tahsil.	District.	Subdivision.	Area cadastrally surveyed — Number of mauzás — Number of villages tested.	Total number.	Number of papers examined.	Number of field work tested.	Testing by check-lines — Number of lines.	Number of stations.	Number of offsets.	Length of lines, in miles.	Number of fields, cultivated or assessable, on the lines of the testing circumference.	Testing without check-lines — Number of fields.	Area, including gunges, in acres.	Number of villages tested.	Area not cadastrally surveyed — Number of mauzás — Total number.	Whose papers examined.	Whose field work tested.	Total area as shown by mauzábandi.	Total area as shown by Settlement-Department.	Pre-retrigal error.	Area of concealed cultivation discovered.	Area found wrongly classed — Land shown as — *Rayti.*	*Ilaqi-lagán.*	*Rayti* shown as *Sarsopti.*	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13.	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
																				Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		
Babu Nibáran Chandra Mukharji ..	Bijni ..	Goálpára ..	Dhubri ..	..	..	..	..	..	..	..	..	..	..	..	..	10	10	10	7	1,741	1,920	4 13	..	..	1	5	
Munshi Rusna Ali ..	Gauhati ..	Kámrúp ..	Sadr ..	4	4	..	..	5	4	1	1·0	....	....	....	....	9	9	9	1	1,264	1,240	9 2	..	..	..	..	In Rámeha extension.
Rája Govinda Rám Chaudhuri ..	Patasbari ..	,, ..	,, ..	..	..	..	..	..	..	..	0·5	....	....	....	....	..	..	..	..	..	..	..	..	..	..	..	
,, Banga Chandra Chaudhuri ..	Boko ..	,, ..	,, ..	14	23	..	..	1	1	..	0·5	178	178	178	1	1	1	1	136	438	0 16	..	2	..	..	..	
												8,500	941	2,189	1,185	15	11	13	8	95	382	7 36	103	..	4	6	* One mauzábandi dismissed in connection with encroached cultivation. In connection with extension of survey.
,, Ganga Rám Das	Patidarrang ..	,, ..	,, ..	63	21	21	14	1	14	3	0·6	1,680	0·28	3,727	1,240	..	..	..	..	..	..	..	..	..	..	..	
								28	242	91	9·7	....	....	....	....	..	..	..	..	..	..	..	..	..	..	..	
,, Uday Chandra Barua ..	Hajo ..	,, ..	,, ..	40	36	36	26	64	1,456	1,202	57·6	1,940	1·45	....	....	1	0 1	..	1	52	0	..	..	..	..	..	
,, Bandhjihar Sarma ..	Nalbari ..	,, ..	,, ..	26	13	10	9	..	..	..	..	1,141	0·84	1,347	1,200	..	..	..	..	..	..	..	..	..	..	..	
								3	17	14	0·31	4·5	0·14	465	437	20	5	1	5	893	897	1 57	..	..	2	27	(a) Re-both cadastral and non-cadastral area in the circle.
,, Purnánanda Chaudhuri ..	Tamulpur ..	,, ..	,, ..	12	16	6	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
,, Chini Rám Das ..	Barama ..	,, ..	,, ..	22	18	7	13	1b	208	267	6·76	....	....	....	....	..	..	..	..	..	..	..	..	..	..	..	Ditto ditto
,, Kali Ram Chaudhari ..	Chhaygaon ..	,, ..	,, ..	7	8	2	5	6	183	126	1·79	·12	342	1,003	417	129	6	..	6	324	464	24 06	..	4	6	209	
,, Ishánáth Barua	Rangya ..	,, ..	,, ..	85	26	18	8	35	679	716	30·8	2,216	4·46	146	1,032	..	..	..	..	..	..	..	..	..	..	..	
,, Hareswar Datta ..	Bajali ..	,, ..	Barpeta ..	27	23	14	14	60	59	1·3	1·8	5,115	2·24	1,000	1,157	..	..	..	..	..	..	..	..	..	..	..	
,, Kesav Chandra Singh ..	Roha ..	,, ..	Ditto ..	12	2	13	13	2	2·6	318	9·74	·91	113	27	1,172	..	..	..	..	..	..	..	..	..	..	..	
,, Sitánáth Sahasia	Mangaldai ..	,, ..	,, ..	11	15	..	5	5	2·0	4	·24	....	....	....	....	..	..	..	..	..	..	..	..	..	..	..	Ditto ditto
,, Dhanmidhar Baruá ..	Kalaigaon ..	,, ..	,, ..	31	24	..	10	15	88	181	8·65	6,040	0·80	324	833	..	..	..	..	..	..	..	..	..	..	..	
,, Bhaikuri Charan Sarma ..	Sipajhar ..	Darrang ..	Mangaldai ..	..	..	..	..	..	..	..	..	Báki no testing work.	....	....	....	..	..	..	..	..	..	..	..	..	..	..	
,, Baikí Charan Sarma ..	Tezpur ..	,, ..	Tezpur ..	6	9	9	6	1*	76	93	2·29	1,186	1·41	....	....	5	7	7	4	3,8·3	4,211	7 36	14	..	..	..	
,, Gangmáli Sarma ..	Chutia ..	,, ..	,, ..	3	2	1	2	4	1·0	33	0·9	1·6	0·21	....	....	2	2	2	2	85	83	0 21	..	..	..	..	
,, Chintrám Hazarika ..	Sowsang ..	Nowgong ..	Nowgong ..	9	14	7	7	30	1·4	210	2·43	1,446	1·37	179	124	..	..	..	..	..	..	..	..	..	..	..	
,, Chandra Kánta Barua ..	Samaguri ..	,, ..	,, ..	19	14	14	11	31	112	152	3·5	2,114	1·34	687	471	..	..	..	..	..	..	..	..	..	..	..	
,, Rudra Nath ,, ..	Raha ..	,, ..	,, ..	2	27	1	1	2	1·0	10	1·43	1·0	·12	....	....	..	..	..	..	..	..	..	..	..	..	..	
,, Dandeshar ,, ..	Golaghát ..	Sibsagar ..	Golaghát ..	6	14	1	7	7	15	7	0·19	1,264	0·3	85	27	2	2	..	2	8	6	..	..	..	..	..	
,, Bisturám ,, ..	Jorhat ..	,, ..	Jorhat ..	2	19	1	2	6	50	15	1·57	992	0·23	....	....	..	..	..	..	..	..	..	..	..	..	..	
,, Dámodhar ,, ..	Namtidal ..	,, ..	Sadr ..	4	29	25	3	11	68	145	2·26	7,698	0·24	....	....	..	..	..	..	..	..	..	..	..	..	..	
Total	.....	.....	.....	378	286	209	140	498	4,123	5,628	131·97	55,422	1·37	12,388	11,342	209	63	40	45	9,797	10,453	6 43	123	4	13	216	

APPENDIX G.

Work Statement of Mauzadárs and Tahsil Muharrirs for the year 1893-94.

District.	Sub-division.	Total number of mauzadárs and muharrirs who did any testing.	Number of villages tested.	Area cadastrally surveyed.											Area not cadastrally surveyed.								Remarks.
				Number of mauzadárs.			Testing by check-lines.						Testing without check-lines.		Number of mauzadárs.								
				Total number.	Whose papers examined.	Whose field-work tested.	Number of lines.	Number of halts.	Number of offsets.	Length of lines, in miles.	Area of fluctuating cultivation in acres.	Number of linear miles per square mile of fluctuating cultivation.	Number of fields.	Area, including jungle, in acres.	Number of villages.	Total number.	Whose papers examined.	Whose field-work tested.	Total area in acres as shown by mauzadárs.	Total area as found by measurement.	Percentage of error.	Area in acres of concealed cultivation discovered.	Area in acres fraudulently classified.		
																						Rent-free shown as	Rent-paying.	Rent shown as *fee-simple*.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
																			Acres.	Acres.		Acres.	Acres.	Acres.	Acres.	
Gedlpára ..	Dhubri ..	7	..	..	..	..	..	..	..	....	....	.....	..	....	18	17	17	12	3,513	3,507	0·63	2	2	4	79	
	Gosipára ..	..	..	..	..	..	..	..	..	....	....	.....	..	....	..	..	..	..	....	....	..	....	..	..	....	Permanently settled.
Kámrúp ..	Barpeta ..	....	48	15	9	15	39	906	874	24·22	14,479	1·84	484	6,031	52	16	18	18	2,260	2,250	0·44	....	..	..	....	
	Gauhátí ..	12	4	4	2	2	4	16	31	0·96	1,130	0·61	60	327	..	1	..	..	....	....	..	....	..	..	....	
			9	7	3	7	32	971	1,52	14·19	....	.....	..	....	..	..	..	..	....	....	..	....	..	..	....	Done by district surveyor in connection with extension survey in Rangpur.
Darrang ..	Mangaldai ..	8	21	16	3	9	24	150	126	6·27	4,705	7·24	152	1,307	4	4	..	4	77	76	1·33	....	..	..	....	
	Tezpur ..	4	6	5	5	5	12	59	98	32·93	1,181	30·36	6	2	10	12	8	6	429	450	4·66	....	..	..	....	
Nowgong ..	Nowgong ..	3	25	23	12	16	32	220	506	13·22	7,756	4·17	376	124	..	..	..	..	....	....	..	....	..	..	....	
Sibságar ..	Golághát ..	10	23	18	9	16	26	118	177	4·53	3,846	0·54	176	921	18	10	4	9	346	349	1·76	....	..	..	....	
	Jorhát ..	11	29	48	17	21	48	208	576	10·05	8,107	0·81	282	293	14	8	5	5	180	183	..	....	..	..	....	
	Sadr ..	7	26	66	1	18	25	319	473	9·46	6,746	0·63	191	....	..	..	..	..	....	....	..	....	..	..	....	
Lakhimpur ..	North Lakhimpur ..	1	..	..	..	..	..	..	..	....	....	.....	..	....	11	..	..	..	....	....	..	....	..	..	....	
	Dibrugarh ..	4	..	..	..	..	..	..	..	....	....	.....	..	....	23	..	..	13	1,384	1,352	2·73	4	..	..	....	The figures include the work of supervisor Kásinnáth Lakhikánta Das in the non-cadastral area.
Total ..	.....	56	191	215	64	109	293	2,315	3,021	117·80	46,892	2·42	1,772	8,873	130	67	52	67	8,683	8,195	1·31	6	2	4	79	

APPENDIX H.

Statement showing the condition of Theodolite Marks on 30th June 1893.

Subdivision.	Classification.	Total number 6 + 7 + 8.	Total number found in good order by mandals.	Total number found not in good order by mandals.		Total of columns 4 and 5 or total in good order on 30th June 1892.	Total number not discovered by mandals.
				Repaired.	Not repaired.		
1	2		4	5	6	7	8
Kámrúp (Sadr) ...	Prisms	3,015	2,881	86	3	2,967	45
	Jungle mounds	1,227	840	216	68	1,056	108
	Simul boughs	3,541	1,832	1,400	253	3,232	156
	Kánungos' *dhips*	2,376	375	1,852	115	2,227	34
	Total	10,259	5,928	3,554	439	9,482	338
Kámrúp (Barpeta) ...	Prisms	578	572	.....	.....	572	6
	Jungle mounds	236	30	.....	11	30	195
	Simul boughs	4,143	1,233	2,342	513	3,075	55
	Kánungos' *dhips*	396	370	26	...	396	....
	Total	5,353	2,205	2,368	524	4,573	256
Darrang (Tezpur) ...	Prisms	438	429	2	1	431	6
	Jungle mounds	.....	.....	.....	.....	.....	.....
	Simul boughs	2,261	2,067	67	67	2,134	60
	Kánungos' *dhips*	3	3	.....	.....	3	.....
	Total	2,702	2,499	69	68	2,568	66
Darrang (Mangaldai) ...	Prisms	1,874	1,871	.....	.....	1,871	3
	Jungle mounds	73	72	1	.....	73	.....
	Simul boughs	5,985	3,445	2,415	36	5,860	89
	Kánungos' *dhips*	104	36	68	.....	104	.....
	Brick prisms	21	21	.....	.....	21	.....
	Total	8,051	5,445	2,484	36	7,929	92
Nowgong	Prisms	2,482	2,176	300	4	2,476	2
	Jungle mounds	242	136	104	2	240	.....
	Simul boughs	11,795	3,869	7,721	45	11,590	160
	Kánungos' *dhips*	343	102	209	32	311	.....
	Total	14,862	6,283	8,334	83	14,167	162

APPENDIX H—*concluded.*

Subdivision.	Classification	Total number 6 + 7 + 8.	Total number found in good order by mandals.	Total number found not in good order mandals.		Total of columns 4 and 5 or total in good order on 30th June 1893.	Total number not discovered by mandals.
				Repaired.	Not repaired		
Sibságar	Prisms	916	870	29	.....	899	17
	Jungle mounds	314	229	.....	15	299	.....
	Simul boughs	9,626	3,307	4,889	1,062	8,196	368
	Kánungos' *dhips*	7	.....	6	1	6	.....
	Total	10,863	4,476	4,924	1,078	9,400	385
Sibságar (Jorhát) ...	Prisms	973	957	12	3	969	1
	Jungle mounds	.....	.....	.....	.....	.....	.....
	Simul boughs	8,439	1,030	4,385	1,558	5,415	1,406
	Kánungos' *dhips*	279	162	55	62	217	.....
	Total	9,691	2,149	4,452	1,623	6,601	1,407
Sibságar (Golághát) ...	Prisms ...	487	475	.....	.....	475	12
	Jungle mounds	281	281	.....	.....	281	.....
	Simul boughs	4,172	1,597	1,550	935	3,147	90
	Kánungos' *dhips*	26	5	.....	21	5	.....
	Total	4,966	2,358	1,550	956	3,908	102
Total	Prisms	10,763	10,231	429	11	10,660	92
	Jungle mounds	13,136	11,889	750	107	12,639	390
	Simul boughs	50,062	18,380	24,769	4,469	43,149	2,444
	Kánungos' *dhips*	3,534	1,053	2,216	231	3,269	34
	Brick prisms	21	21	.....	.....	21	.....
	Grand total	66,753	31,343	27,735	4,807	59,078	2,868

APPENDIX I.

Statement of Rainfall Stations and Instruments for the year 1893-94.

District.	Number of stations on 31st March 1893.			Number abolished during the year 1893-94.	Number added during the year 1893-94.	Number of stations on 31st March 1894.			Number of Government instruments in the district on 31st March 1894.				Remarks.
	Government.	Private.	Total.			Government.	Private.	Total.	Symons's gauges.	Measuring glasses.	Spirit-levels.	8-inch measuring gauges.	
Cachar ...	3	7	10	...	...	3	7	10	10	18	4	4	
Sylhet ...	5	6	11	...	1	5	7	12	11	22	...	..	The new station added is Sephinjuri Bheel. It has its own instruments.
Goálpára ...	4	1	5	...	1	5	1	6	6	8	...	...	The Dhubri station has an observatory, and is under the direct management of the Meteorological Reporter to the Government of India. The new station added is Dáimra.
Kámrúp ...	11	5	16	..	...	11	5	16	16	32	...	.	
Darrang ...	3	9	12	...	...	3	9	12	12	24	4	..	
Nowgong ...	1	6	7	...	...	1	6	7	7	14	...	...	
Sibságar ...	3	8	11	...	...	3	8	11	11	20	...	...	The Sibságar sadr station has an observatory, and is under the direct management of the Meteorological Reporter to the Government of India.
Lakhimpur ...	4	8	12	...	...	4	8	12	12	24	...	...	
Nága Hills ...	4	1	5	...	...	4	1	5	5	10	...	...	
Khási and Jaintia Hills ...	3	...	3	...	...	3	...	3	3	6	...	1	
Gáro Hills ...	1	...	1	...	...	1	...	1	1	2	1	1	
Manipur ...	1	...	1	...	...	1	...	1	1	2	...	...	
North Lushai ...	...	...	...	...	1	1	...	1	1	2	...	...	
Total	43	51	94	...	3	45	52	97	96	184	9	6	

N.B.—The stations of which the registrars are private individuals are classed as private, though most of them are supplied with Government instruments.

ASSAM SECRETARIAT PRINTING OFFICE (HEVE) No. 118—325—12-9-94.

Remarks on the Report of the Department of Land Records and Agriculture, Assam, for 1893-94.

It is requested that any reply, or future reference, to this communication may quote its number, distinguishing letters, and date.

No. { 220 Agri. / 4621R. }

FROM

THE OFFG. SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM,

TO

THE DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM.

Shillong, the 4th October 1894.

SIR,

I AM directed to communicate the following remarks of the Officiating Chief Commissioner upon your Report on the Operations of the Department of Land Records and Agriculture, Assam, during the year 1893-94.

2. *Paragraphs 4 and* 5.—From the statements given in these paragraphs the Officiating Chief Commissioner observes that only 4 out of 14 Sub-Deputy Collectors reached the prescribed standard of 150 days in camp. The amount of touring done by many of the supervisor kanungos also was considerably below the minimum laid down of 200 days. The Officiating Chief Commissioner agrees with you that District Officers should require their Sub-Deputy Collectors to exercise more close and continuous supervision in respect of the work and touring of this class of officers. It is observed that some of the supervisor kanungos, who were found at the end of the year to have been remiss in their out-door work, have been punished; but the proper course obviously is to take steps to ensure that this work shall be kept well up to the mark throughout the year.

3. *Paragraph* 14.—In this paragraph you say that a great deal more might be done by Deputy Commissioners and Subdivisional Officers in the matter of inspecting the papers and maps of mandals and supervisor kanungos than has hitherto been the case. The Government of India, in reviewing the Report for 1891-92, noticed with dissatisfaction the inattention displayed by District and Subdivisional Officers in this respect, and their special attention was drawn by Mr. Daukes' letter No. 6223-28R., dated the 1st December 1892, to the orders which had issued from time to time on the subject. The Officiating Chief Commissioner endorses your opinion, and trusts that the Heads of Districts and Subdivisional Officers will in future show that they have realised their responsibilities in this respect. Although it may not be possible for them to do much actual testing work themselves, Mr. Lyall considers that they might do more, without prejudice to their other duties, in the way of inspecting the work of the Land Records Establishments, especially during their tours.

4. *Paragraph* 23.—This paragraph of the Report shows that the returns furnished by district authorities regarding the condition of survey marks is not yet accurate, but that action is being taken for its improvement. The Officiating Chief Commissioner is glad to find that the importance which attaches to the preservation of these marks is gradually being appreciated.

5. *Paragraph* 26.—The Officiating Chief Commissioner will await the receipt of the report which you propose to submit separately in connection with extension surveys.

I have the honour to be,

SIR,

Your most obedient Servant,

P. G. MELITUS,

Offg. Secretary to the Chief Commissioner of Assam.

MEMO. NO. {220Agri. / 3622R.}

Shillong, the 4th October 1894.

COPY, with a copy of the Report, forwarded to the Commissioner of the Assam Valley Districts, for information, special attention being invited to paragraph 3 of the letter to the Director, Department of Land Records and Agriculture.

By order of the Chief Commissioner of Assam,

P. G. MELITUS,

Offg. Secretary to the Chief Commissioner of Assam.

A. S. P. O. (Rev.) No. 218—675—5-10-94.

ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

FOR THE YEAR

1894-95.

BY

E. A. GAIT, Esq., I.C.S.,

DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE.

SHILLONG:

PRINTED AT THE ASSAM SECRETARIAT PRINTING OFFICE.

1895.

PRICE ONE RUPEE.

SHILLONG :
PRINTED BY THE SUPERINTENDENT OF THE ASSAM SECRETARIAT
PRINTING DEPARTMENT.

No. 2166.

FROM

E. A. GAIT, ESQ., I.C.S.,

Director, Department of Land Records and Agriculture, Assam,

TO

THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Dated Shillong, the 28th May 1895.

SIR,

I HAVE the honour to submit the Twelfth Annual Report, giving an account of the operations of this Department for the year ending the 31st March 1895.

I have the honour to be,

SIR,

Your most obedient Servant,

E. A. GAIT,

Director, Department of Land Records and Agriculture, Assam.

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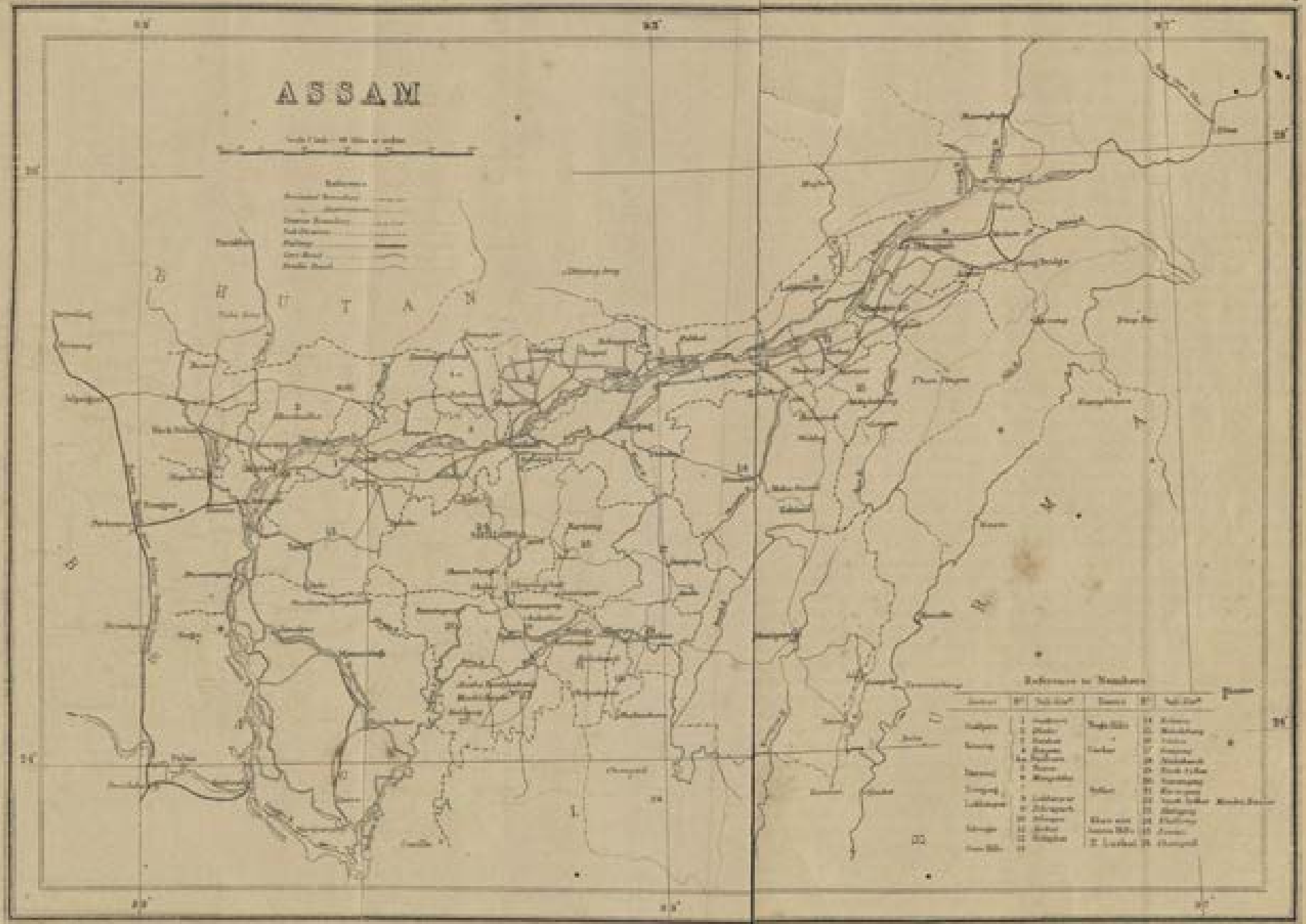
ASSAM
B H U T A N
Reference to Numbers

Annual Report of the Department of Land Records and Agriculture, Assam, for the year 1894-95.

Report writing.

The following reports were issued during the year:

(1) The Departmental Report.
(2) The River-borne Trade Report.
(3) The Survey and Settlement Report.
(4) The Note on Crop Experiments.
(5) The Note on Foreign Trade for incorporation in the General Administration Report.

In addition to these, the Provincial Land Revenue Report was drafted in my office as usual, and a special report on the extension of survey operations was drawn up. A good deal of my time during the rains was taken up in revising the Rules for the maintenance of survey maps and records, in dealing with the Consolidated rules under the Assam Land and Revenue Regulation, and in examining the drafts of field and procedure rules submitted by the Settlement Officer, Cachar. Under the orders of the Government of India, contained in paragraph 4 of the Revenue and Agricultural Department Circular No. $\frac{4}{4}\frac{8}{4}$, dated the 17th June 1893, a report on the hailstorms of the year was sent to the Meteorological Reporter. During the cold weather, notes were drawn up on the final classification of villages and assessment in Jaintia, and on the principles to be followed in the coming re-assessment of the Cachar district. A note was also written on the subject of the pottery manufactures of the province.

Director's tours.

2. During August I made a short tour in the Brahmaputra Valley. Leaving Shillong on the 8th, I visited in turn Gauháti, Dhubri, Tezpur, Sibságar, and Dibrugarh, returning to headquarters on the 26th. The final classification of the areas surveyed in 1890-91, and the preliminary classification of those surveyed in 1891-92, and the extensions of survey to be carried out in the cold weather, were the chief matters to which attention was directed during this tour; in addition, the traffic registration office at Dhubri was inspected and the arrangements to be made in connection with the new Survey School at Jorhát were discussed with the Deputy Commissioner at Sibságar.

On the 14th November I left Shillong for my cold-weather tour, proceeding in the first instance to the Surma Valley. I was engaged for eleven days at Sylhet in discussing with the Deputy Commissioner and the Settlement Officer, Jaintia, the proposals of the latter for the final classification of villages, in connection with the re-settlement of the Jaintia parganas, and the rates of assessment to be imposed, and in drawing up my report on the subject. At the same time, proposals were drawn up for the appointment of an establishment of supervisor kanungos and *patwáris* to keep the settlement maps and records up to date; the distribution of circles and other details connected with the scheme were also arranged. The first three weeks of December were spent in the Cachar district. All parts of the Kátigara tahsil were visited, and proposals were drawn up regarding the procedure to be adopted in connection with the revision of the assessment. In the course of my tour, I met the Deputy Surveyor General at Silchár, and discussed with him various details connected with the maintenance of survey maps and records. A conference was also held in the survey camp between the Deputy Surveyor General, the Superintendent of Surveys, the Settlement Officer, Cachar, and myself, at which various details connected with the Cachar survey and settlement operations were settled. Leaving Cachar, I made a cursory inspection of settlement procedure in the cadastrally-surveyed area in Karimganj, and then proceeded to the Assam Valley.

I first went to the Bijni Duár in Goálpára to settle various matters in connection with the survey operations which have been started there, and then toured through all the subdivisions of Assam Proper, inspecting the work of the land records staff. I visited in turn Kámrúp sadr, Nowgong, Mangaldai, Tezpur, North Lakhimpur, Jorhát, Golághát, Sibságar, Dibrugarh, and Barpeta, and returned to Shillong on the 14th April. In the course of my tour, I inspected the offices of all sadr and subdivisional registrar kanungos, and the work of every one of the 40 supervisor kanungos and of 722 out of 757 mandals employed in the area cadastrally surveyed. Altogether I was in camp for 175 days.

Superintentent of Land Records' tours.

3. At the beginning of the year, Mr. O'Donel, the Superintendent of Land Records, was on tour in the Nowgong district. He next toured through the Golághát subdivision and part of the Jorhát subdivision in the Sibságar district, whence he proceeded for a few days to Gauháti to conduct the examination for first class survey school certificates. He then visited in succession the Májuli, the North Lakhimpur subdivision, and that portion of the Jorhát subdivision which he had left unvisited when he was called away to Gauháti. After leaving Jorhát, he toured through the sadr subdivision of Sibságar and the Dibrugarh sadr subdivision. On the 1st July 1894, Mr. O'Donel proceeded to Mangaldai, and after completing his inspection of the land records staff there, he reached Tezpur on the 24th July. From the 9th August to the 19th September the work of the mandals and kanungos of the two subdivisions of the Kámrúp district was under inspection. From the 21st September to the end of October he was engaged at Tezpur in teaching the use of the theodolite to twelve kanungos and 38 mandals, who had been deputed from different parts of the valley to be trained in the use of that instrument. During his stay at Tezpur, he tested the area calculations and compared the boundaries of the maps of the tracts surveyed by local agency in the districts of Nowgong and Sibságar and the subdivision of Mangaldai. During the first half of November, Mr. O'Donel was at Gauháti, where he held a second examination for first class survey school certificates. His cold-weather tour commenced on the 19th November. In the course of this tour he inspected the work of the land records staff in the subdivisions of North Lakhimpur, Dibrugarh, Sibságar sadr, Golághát, Jorhát, and Nowgong. Altogether the Superintendent of Land Records was in camp for 311 days. In the course of his tours he inspected every subdivision once, and visited on two occasions all the subdivisions of the Sibságar and Lakhimpur districts. Mr. O'Donel deserves great credit for the energy which he has shown in the matter of touring during the twelve months under review.

Sub-Deputy Collectors' tours.

4. The following statement shows briefly the touring done by the Sub-Deputy Collectors. Full particulars as to the manner in which they spent their time will be found in Appendix A :

Name.	Subdivision.	Number of days in charge.	Number of days on tour			Remarks.
			In cadastral measure.	In non-cadastral measure.	Total.	
Babu Purna Chandra Mitra ...	Karimganj ...	365	141	38	179	
,, Tripura Charan Mukherji (Temporary Sub-Deputy Collector.)	Dhubri ...	48	10	23	33	
,, Jajnesvar Dás Gupta ...	,, ...	98	...	5	5	
,, Párvati Sankar Kar ...	Barpeta ...	158	23	...	23	Held charge up to 5th September 1894.
,, Rajani Kánta Bardalai ...	,, ...	154	83	24	107	Joined on 23th October 1894.
,, Bholá Náth Dás ...	Gauháti ...	365	141	10	151	
,, Ratnadhar Barua ...	Mangaldai ...	23	...	9	9	
,, Jajnesvar Dás Gupta ...	,, ...	265	101	41	142	
,, Krishna Chandra Chaudhuri	Tezpur ...	365	159	11	170	
,, Rádhá Mohan Dás ...	Nowgong ...	304	145	14	159	
Munshi Didar Uddin Ahmad ...	Golághát ...	185	36	16	52	Was in charge from 1st April to 31st October 1894, when he went to the survey camp at Silchár to learn surveying.
Babu Rádhá Kánta Hándiqui ...	Jorhát ...	222	63	...	63	Excluding 143 days spent in the survey camp at Silchár.
,, Phanidhar Chaliha ...	Sibságar sadr	365	176	9	185	
Munshi Mashiat Ulla ...	Dibrugarh ...	365	115	60	175	
Babu Rajani Kánta Bardalai ...	North Lakhimpur.	202	27	23	50	Made over charge on 11th October 1894.
Maulvi Muhammad Sádir ...	,, ...	163	62	18	80	

From the above statement it will be seen that five Sub-Deputy Collectors were attached to the stations shown against their names throughout the year, and all of them were on tour for more than 150 days, which is the minimum period of touring prescribed for these officers. Babu Phanidhar Chaliha, of Sibságar, spent the longest time in camp, *viz.*, 185 days. Babu Rajani Kánta Bardalai was transferred from North Lakhimpur to Barpeta in the course of the year; taking his work in the two subdivisions together, he was on tour for 157 days. Babu Rádhá Mohan Dás exceeded the minimum touring period by nine days, although he was in charge for 304 days only. Babu Jajnesvar Dás Gupta was on tour in Dhubri and Mangaldai taken together for 147 days, or three days less than the minimum. The other Sub-Deputy Collectors, who held their appointments for a part of the year only, were all of them on tour for more than the minimum period, taking into consideration the number of days for which they held charge, except Babu Rádhá Kánta Hándiqui and Munshi Didar Uddin Ahmad. These two officers were away at the survey camp in Cachar during the greater part of the cold weather, and so were unable to show a good return of touring.

Taken as a whole, the amount of touring done by the Sub-Deputy Collectors is highly satisfactory.

Supervisor kanungos' tours.

5. The touring done by the supervisor kanungos is shown in detail in Appendix B. The statement given below shows that eight of the fifteen men, who were in charge of a circle for the whole year, exceeded the minimum touring period prescribed for them (200 days), the longest time (282 days) being that spent on tour by Lakshmi Rám Dás, of Chuguá. Of those whose touring fell below this minimum, the worst offenders were Nityánanda, of Beltala (146 days), Jajna Rám Saharia, of Káláigáon (148 days), Lalit Rám Chaudhuri, of western circle, Sibságar sadr (152 days), and Titá Rám Datta, of Barigog (159 days). Twenty-four supervisor kanungos were in charge of their circles for a portion of the year only. Ten of these were on tour for a sufficient number of days, as compared with the period for which they held charge of their circles, and the others toured less than they should have done. The deficiencies of those who were on tour for less than the prescribed period have been brought to the notice of the district officers concerned in my district inspection notes, and many of them have been punished in consequence.

In order to reduce the office work of the kanungos, and thus leave them more time for touring, it has been arranged to relieve them of the work of preparing, for the use of their mandals, traces of the villages surveyed by local agency, which have never been printed, and of the villages surveyed by the professional party in which, owing to fluctuations in the cultivation, the printed maps have become obsolete. Traces of the former will in future be prepared by a special staff of tracers, while for the latter the obsolete maps will be converted into tracing prints in the Surveyor General's office.

The revised Mandals' Rules (*cf.* Rule 114) insist on the responsibility of the Sub-Deputy Collectors for keeping these officers up to the mark throughout the year, and it is hoped that next year's return will show a considerable improvement in the matter of touring by supervisor kanungos :

District.	Subdivision.	Name of circle.	Name of supervisor kanungo.	Number of days in charge.	Number of days on tour.	Remarks.
Kámrúp ...	Barpeta ...	Baijáli ...	Sáháb Uddin ...	304	159	
,, ...	,, ...	,, ...	Sitá Rám (offg.) ...	61	23	
,, ...	,, ...	Barpeta ...	Basir Ali Biswás ...	334*	165	*Exclusive of 31 days spent at the Tezpur theodolite class.
,, ...	,, ...	Raha ...	Bhagirath Deka ...	365	233	
,, ...	Gauháti ...	Beltala ...	Nityánanda	365	146	
,, ...	,, ...	Paldsbári ...	Mantan Rám	122	60	
,, ...	,, ...	,, ...	Jagat Rám (offg.) ...	188	106	
,, ...	,, ...	,, ...	Kan Náth	55	31	
,, ...	,, ...	Boko ...	Mághi Rám ...	123	72	
,, ...	,, ...	,, ...	Thánu Rám (offg.) ...	104	62	
,, ...	,, ...	,, ...	Rangdev Sarma... ...	138	119	
,, ...	,, ...	Pátidarrang...	Báti Rám (offg.) ...	156	92	

District.	Subdivision.	Name of circle.	Name of supervisor kanungo.	Number of days in charge.	Number of days on tour.	Remarks.
Kámrúp ...	Gauháti ...	Pátidarrang...	Molán Chandra Bara ...	209	95	
,, ...	,, ...	Hájo ...	Juju Rám (offg.) ...	109	46	
,, ...	,, ...	,, ...	Jiu Rám ...	256	142	
,, ...	,, ...	Barkhettri ...	Laghanu Rám Dás ...	218	80	
				146	111	Employed in Bijni extension survey.
,, ...	,, ...	,, ...	Molán Chandra Bara ...	147	116	
,, ...	,, ...	Barigog ...	Titá Rám Datta ...	365	159	
,, ...	,, ...	Pánduri ...	Kan Náth ...	130	37	
,, ...	,, ...	,, ...	Nar Náth (offg.) ...	53	...	
,, ...	,, ...	,, ...	Mantan Rám ...	182	94	
,, ...	,, ...	Nalbári ...	Rangdev Sarma ...	183	68	
,, ...	,, ...	,, ...	Sánti Rám (offg.) ...	102	47	
,, ...	,, ...	,, ...	Mághi Rám Dás ...	80	61	
,, ...	,, ...	Támbulpur...	Dhir Sing Deka ...	331*	207	*Exclusive of 34 days spent at the Tezpur theodolite training class.
,, ...	,, ...	Barama ...	Madhab Rám Gagai ...	316	180	
,, ...	,, ...	,, ...	Puá Rám (offg.) ...	49	...	
Darrang ...	Mangaldai	Mangaldai ...	Kalámani Dás ...	317†	182	† Ditto 48 days.
,, ...	,, ...	Kúláigáon ...	Jajna Rám Saharia ...	365	148	
,, ...	,, ...	Sipájhar ...	Chandra Kánta Sarkár ...	306	145	
,, ...	,, ...	,, ...	Mani Rám Dás (offg.) ...	31	9	
,, ...	,, ...	,, ...	Saru Rám Dás (offg.) ...	28	9	
,, ...	,, ...	Bengbári ...	Rámmal Dás ...	365	168	
,, ...	Tezpur ...	Western ...	Kush Rám Dás (offg.) ...	22	18	
,, ...	,, ...	,, ...	Durgá Rám Datta ...	343	162	
,, ...	,, ...	Eastern ...	Gangá Rám Dás ...	365	212	
Nowgong...	Nowgong ...	Town ...	Rabi Charan Dás ...	365	224	
,, ...	,, ...	Silghát ...	Rámrath Datta ...	317‡	221	‡ Ditto 48 days.
,, ...	,, ...	Doboka ...	Jai Rám Dás ...	365	249	
,, ...	,, ...	Raha ...	Sib Náth Sarma ...	365	239	
,, ...	,, ...	Dhing ...	Gobinda Rám Datta ...	135	123	
,, ...	,, ...	,, ...	Bhakat Rám Datta ...	133	12	
,, ...	,, ...	,, ...	Madan Chandra Sarma ...	97	56	
,, ...	,, ...	Gerua ...	Gobinda Rám Datta ...	178§	93§	§ Ditto 52 days.
,, ...	,, ...	,, ...	Bhakat Rám Datta ...	135	124	
,, ...	,, ...	Ghugua ...	Lakshmi Rám Dás ...	365	282	
,, ...	,, ...	Máyang ...	Titá Rám Gagai ...	365	214	
Sibságar ...	Golághát...	Northern ...	Manu Rám Talukdár ...	365	182	
,, ...	,, ...	Southern ...	Puá Rám Mahanta ...	313**	223	** Ditto 52 days.
,, ...	Jorhát ...	Eastern ...	Mahi Rám Dáş (junior) ...	192‖	70	‖ Ditto 50 days.
,, ...	,, ...	,,	Ditto	113¶	113	¶ Deputed to theodolite survey and demarcation of special tenures.
,, ...	,, ...	,, ...	Náráyan Sarma (offg.) ...	10	...	
,, ...	,, ...	,, ...	Bholá Rám Datta (offg.) ...	113	76	
,, ...	,, ...	South-Western	Káti Rám Dás	345	178	

District.	Subdivision.	Name of circle.	Name of supervising kanungo.	Number of days in charge.	Number of days on tour.	Remarks.
Sibságar ...	Jorhát ...	South-Western	Nárávan Sarma (offg.) ...	20	...	
,, ...	,, ...	North-Western	Mahi Rám Dás (senior) ...	365	176	
,, ...	,, ...	Májuli ...	Miná Rám Dás ...	365	166	
,, ...	Sadr ...	Eastern ...	Sib Rám Bara ...	316*	176	* Exclusive of 49 days spent in the Tezpur theodolite training class.
,, ...	,, ...	Central ...	Meher Uddin Bara ...	224	65	
,, ...	,, ...	,, ...	Gobinda Náth Ráy ...	135	87	
,, ...	,, ...	Western ...	Lalit Rám Chaudhuri ...	365	152	
Lakhimpur	Dibrugarh...	Dibrugarh ...	Maheswar Dás ...	310	159	
,, ...	,, ...	,, ...	Chandreswar Sarma (offg.)...	55	3	
,, ...	,, ...	Chábua ...	Lakshmi Kánta Dás ...	316‡	154	‡ Ditto 49 days.
,, ...	N.Lakhimpur	N. Lakhimpur	Jagannáth Deka ...	294†	192	† Ditto 51 days.
,, ...	,, ...	,, ...	Kamalá Kánta (offg.) ...	20	14	

6. In addition to the two old survey schools at Gauháti and Dibrugarh, a new school was started in October last at Jorhát, in the Sibságar district.

Survey schools.

The statement below gives details as to the number of pupils passed by each school during the year, and the average cost per pupil :

Year	Number of men who received first class certificates.			Number of men who received second class certificates.						Total cost of the school.	Total receipts.	Net cost.	Average net cost of each passed pupil.
	Tehsildars.	Munsiffs.	Mandals.	Candidates.	Total.	Munsiffs.	Mandals.	Candidates.	Total.	Total passed.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
											Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1893-94 Gauháti	..	..	..	..	7	7(a)	..	7	91	98(b)	65	1,170 13 9	1,138 10 1(c)	32 3 8	0 7 11
1893-94 Dibrugarh	..	..	..	..	..	..	..	18	38(d)	56	761	724 15 9	138 0 0	*586 15 9	16 3 10
Total 1893-94	..	..	..	..	7	7(a)	..	25	69	94	101	1,895 13 6	1,276 10 1	619 3 5	16 2 1
1894-95 Gauháti	..	..	..	..	9	9	..	4	48(e)	52	61	1,089 1 11	903 8 0(f)	185 9 11	3 0 8
1894-95 Dibrugarh	..	..	..	..	..	..	..	3(g)	9(h)	12	14	628 13 9	42 0 0	586 13 9	41 14 8
1894-95 Jorhát	..	..	..	..	..	..	..	..	5	5(i)	9	505 12 6	136 0 0	367 12 6	40 13 10
Total 1894-95	..	..	..	..	9	9	..	13	62	75	84	2,223 12 2	1,083 8 0	1,140 4 2	13 9 2

* Out of this, Rs. 49-8 represent the sale-proceeds of Mandal's Rules.

(a) Besides these, one outsider mandal and three outsider candidates passed.
(b) Besides these, two outsider candidates passed.
(c) Out of this ,, 761-7-8 represent the sale-proceeds of Mandal's Rules.
(d) Besides these, five mandals and eleven candidates not taught in the school passed.
(e) Besides these, two outsider candidates passed.
(f) Two outsider mandals passed.
(g) Besides these, two outsider candidates passed.
(h) In addition to these one outsider mandal and one outsider candidate passed from the Jorhat Survey School.

The expenditure of the Gauháti school was rather less than in the previous year; the receipts showed a considerable falling-off, owing to the smaller number of candidate's reading in the school. The net cost per passed pupil rose from Re. 0-7-11 to Rs. 3-0-8. At Dibrugarh the receipts declined from Rs. 138 to Rs. 42, owing chiefly to the large number of free studentships granted by the Deputy Commissioner; the revised Survey School Rules limit the number of free admissions of candidates to 25 per cent. of the total number of persons reading in the school. This school is an expensive one, and the Deputy Commissioner has suggested that it should be closed. But, in view of the backward state of the district, it seems desirable that it should be kept open for some

time longer, so as to provide a reserve of qualified men to appoint to mandalships as vacancies occur. Many of the existing mandals are in the highest degree incompetent, and they are only kept on because there is no one to take their places. The Jorhát school is doing useful work; it is only in the first year of its existence and the results cannot fairly be judged at present by the standard of cost. As stated last year, the addition to the curriculum of the rules for the proper maintenance of settlement maps and records has caused a falling-off in the number of men passing the term examinations. Three examinations for first class survey certificates were held by the Superintendent of Land Records, *viz.*, two at Gauháti and one at Dibrugarh. Of the two held at Gauháti, one took place in November 1894 and the other in May 1895. At the former no mandals or candidates from the school appeared; the only three men who competed were two outsider mandals and one outsider candidate. Of these, only one (a mandal) passed. At the second examination twenty-two school candidates, one outsider candidate, and two outsider mandals appeared. Nine passed, all of whom were school candidates. The examination at Dibrugarh was held in June 1894. No one from the Dibrugarh school appeared. Eight outsider candidates presented themselves, but they all failed.

Special Survey Examination for tahsildars.

7. The tahsildars of the Brahmaputra Valley, who were liable to the examination in practical surveying under the provisions of Chapter V, Section IV, Rule 7, of the Manual of Executive Rules, were Babu Cheni Rám Dás, of Barama, Munshi Muhammad Eunas Ali, of Gauháti, Babus Sitá Náth Saharia, of Mangaldai, Sánti Rám Házárika, of Nowgong, Chandra Kánta Barua, of Sámáguri (Nowgong), Rudra Náth Barua, of Raha (Nowgong), Dandadhar Barua, of Golághát, and Bistu Rám Barua, of Jorhát. Of these, Babus Cheni Rám Dás and Sitá Náth Saharia were examined by me during my cold-weather tour. The latter was found to be a competent surveyor, and the usual certificate was granted to him, but the former again failed to display anything like an adequate knowledge of surveying. Babu Dandadhar Barua, of Golághát, who failed last year, was to have been examined by the Superintendent of Land Records, but the Subdivisional Officer could not spare him at the time fixed for the examination. The other tahsildars were examined by the Superintendent of Land Records. Munshi Muhammad Eunas Ali had to retire from the examination owing to illness, and Babus Chandra Kánta Barua, Rudra Náth Barua, and Bistu Rám Barua failed to qualify. Babu Sánti Rám Házárika alone succeeded in passing the required test. Out of 29 tahsildars, 13 have now passed in practical surveying, and 7 have been exempted.

In the Surma Valley, the tahsildars of Silchár and Hailákándi were given a practical training in surveying during the season 1893-94 (*vide* paragraph 8 of the Report of this Department for that year). Last season, I suggested to the Deputy Commissioner of Sylhet the desirability of sending to the survey camp at Silchár the tahsildars and naib tahsildars of the two Jaintia tahsils, but the Deputy Commissioner was unable to spare them. These officers have hitherto been a purely collecting agency; but now that a staff of *patwáris* has been appointed to keep the settlement maps and records up to date, I think that the tahsildars should be required to take their share in the supervising and testing of their work. If so, it is very desirable that arrangements should be made for their deputation to the survey camp next cold weather.

Qualified subordinate officials.

8. The following statement gives details as to the number of qualified mauzadars and mandals in Government employ in the Assam Valley districts and in the cadastrally-surveyed portions of Sylhet at the close of the year under report, as compared with the figures of the preceding year; details as to the number of qualified candidates for employment are also given:

District.	Total number on 31st March 1895.		Number exempted on 31st March 1895.		Men with first class certificates on 31st March.						Men with second class certificates on 31st March.					
					Mauzadars.		Mandals or *patwáris*.		Candidates.		Mauzadars.		Mandals or *patwáris*.		Candidates.	
	Mauzadars.	Mandals or *patwáris*.	Mauzadars.	Mandals or *patwáris*.	1894.	1893.	1894.	1895.	1894.	1895.	1894.	1895.	1894.	1895.	1894.	1895.
Sylhet (Pratabgarh) ...	...	4	...	...	...	...	...	1	...	...*	...	...	...	3	...	...*
,, (Jaintia) ...	...	22	...	...	...	...	...	17	...	...*	...	...	...	26	...	...*
Goalpára ...	8	35	7	...	...	...	1	1	...	...	...	...	7	13	...	...
Kámrúp ...	8	300	...	15	2	2	26	53	26	30	2	2	150	233	144	80
Darrang ...	13	140	3	6	1	1	15	17	1	1	5	4	110	104	31	30
Nowgong ...	21	166	...	...	4	4	24	23	2	2	1	1	142	123	31	40
Sibsagar ...	27	174	5	1	2	2	31	31	3	3	21	13	140	104	5	4
Lakhimpur ...	30	144	...	...	3	4	4	3	1	1	2	2	42	60	13	18
Total ...	113	3,813	15	22	12	13	101	144	32	37	32	29	638	664	224	186

* Figures have not yet been obtained.

As stated last year, men who worked as amins with the cadastral survey party have been classed with the holders of first class survey school certificates, and those who passed through the survey training class and obtained the preliminary certificates given by the Superintendent of Survey have been treated as possessing qualifications equal to those possessed by persons who have passed the second class survey school examination. It will be seen that, as compared with the previous year, there is, as there should be, a decrease in the number of mauzadars and mandals exempted from examination.

Grading of mandals.

9. The following statement shows the number and grading of mandals in each district of the Assam Valley, and in Pratábgarh and Jaintia in Sylhet, as it stood on the 1st April 1895, and compares the figures with those of the previous year and with the sanctioned scale:

Name of district.	Sanctioned scale				Scale on the 1st April 1894.				Scale on the 1st April 1895.				Increase or decrease during the year.			
	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Sylhet (Pratábgarh).	...	1	3	4	...	...	...	...	...	...	4	4	...	...	+ 4	+ 4
„ (Jaintia)...	10	15	27	52	...	...	...	...	...	...	52	52	...	...	+52	+52
Goálpára ...	7	10	18	35	1	11	23	35	1	10	24	35	...	— 1	+ 1	...
Kámrúp ...	59	88	148	295(a)	17	98	180	293(a)	25	105	165	295(a)	+ 8	+ 7	−15	...
Darrang ...	30	45	75	150	12	51(b)	80(b)	143	17	58	65	140	+ 5	+ 7	−15	− 3
Nowgong ...	34	51	85	170	16	21	129	166	14	36	116	166	± 2	+15	−13	...
Sibságar ...	40	62	103	205	18	30	157	205	22	48	134	204	+ 4	+18	−23	− 1
Lakhimpur ...	24	36	60	120	4	18	86	108	5	22	81	108	+ 1	+ 4	− 5	...
Total ...	204	308	519	1,031	68	229	655	952	84	279	641	1,004	+16	+50	−14	+52

(a) Exclusive of the five mandals of Beltala paid by the mauzadar.
(b) Revised figures.

There has been an increase in the number of first and second grade men in nearly every district, owing to the promotion, wherever possible, of deserving men in the lower grades to fill vacancies in the higher ones.

Letters No. 559Rev.—2319R., dated the 21st July 1894, and No. 148Survey—227R., dated the 23rd January 1895, from the Secretary to the Chief Commissioner.

A special feature of the year's work is the entertainment of a land records staff in Jaintia and Pratábgarh to keep up to date the maps and settlement records prepared by the professional survey party, and the settlement staff working in conjunction with it. The letters containing the orders of the Chief Commissioner sanctioning this staff, are quoted in the margin.

Punishment of kanungos and mandals.

10. In accordance with paragraphs 6 and 7 of the Secretary to the Chief Commissioner's Circular No. 48R., dated the 28th December 1894, all fines and other punishments inflicted on supervisor kanungos and mandals are now reported for record in my office. The subject is discussed by the Commissioner in his Land Revenue Report, under the head "Fines on fiscal officers," so there seems to be no necessity for dealing with it in this report.

Prescribed headings.

11. In the paragraphs below the headings prescribed by the Government of India in Circular No. 54A., dated the 28th April 1884, have been separately taken up.

I.—ORGANISATION AND MAINTENANCE OF VILLAGE RECORDS.

12. The statement below shows the number of mandals and supervisor kanungos whose papers were examined by me and the Superintendent of Land Records :

Inspections by the Director of Land Records and Agriculture and the Superintendent of Land Records, Assam.

District	Subdivision	Total number of supervisor kanungos in cadastrally-surveyed area.	Number of kanungos whose work inspected by		Total number of mandals in cadastrally-surveyed area.	Total number of mandals whose work inspected by		Remarks.
			Director of Land Records and Agriculture.	Superintendent of Land Records.		Director of Land Records and Agriculture.	Superintendent of Land Records.	
Kámrúp	Barpeta ...	3	3	3	55	55	51	
„	Gauháti ...	11	11	11	204	193	186	
Darrang	Mangaldai ...	4	4	4	83	82	78	(a) Visited twice by the Superintendent of Land Records.
„	Tezpur ...	2	2	2	25	25	25	(b) Exclusive of 6 mandals in Ahatguri.
Nowgong	Nowgong ...	8	8	8	151	149	141	(c) Of these, 42 were visited twice.
Sibságar	Golághát ...	2	2	2(a)	47(b)	47	47(c)	(d) Inclusive of 6 mandals in Ahatguri.
„	Jorhát ...	4	4	4(a)	78(d)	78	78(e)	(e) Of these, 68 were visited twice.
„	Sadr ...	3	3	3(a)	68	55	68(f)	(f) Of these, 56 were visited twice.
Lakhimpur	Dibrugarh ...	2	2	2(a)	27	27	26(g)	(g) Of these, 21 were visited twice.
„	North Lakhimpur	1	1	1(a)	19	11	19(h)	(h) Of these, 18 were visited twice.
	Total ...	40	40	40	757	722	719	

The work of all the 40 supervisor kanungos and 722 out of 757 mandals employed in the cadastrally-surveyed area was inspected by me.* The Superintendent of Land Records inspected the work of all the 40 supervisor kanungos and 719 mandals. The work of the twelve kanungos in Sibságar and Lakhimpur and 205 mandals of these districts was seen twice over by the Superintendent of Land Records. The net result of our inspections is that of the 40 supervisor kanungos, the work of twelve was inspected three times and that of the remaining 28 twice. Out of 757 mandals employed in the cadastrally-surveyed area, the work of 184 was inspected three times and of 518 twice, while 55 were inspected once only ; no mandal escaped inspection altogether. A brief account of the results of the inspections, as far as the condition of the village papers of each subdivision and district is concerned, is given below :

Kámrúp.—In this district there are, in the cadastrally-surveyed area, 14 supervisor kanungos and 259 mandals. Of these, the Superintendent of Land Records saw all the 14 kanungos and 237 mandals, and I inspected the papers of all the kanungos and 248 mandals. Settlement work was found to be more nearly up to date than was the case last year, and a general improvement was noticed in the observance of the rules for the proper maintenance of survey maps and records. In the sadr subdivision the erection and maintenance of survey marks still fails to receive the required amount of attention, particularly in the Hájo, Pátidarrang, Pánduri, Barigog, and Barama circles. Cases were noticed in which the position of survey marks was determined by forbidden methods, such as triangulation and measuring from the corners of old fields; the work of erecting mounds of the prescribed size was found to have been much neglected in the areas surveyed in extension. In Barpeta the condition of the marks denoting theodolite stations is very unsatisfactory ; a large number remained unvisited last year, and some have disappeared altogether. This matter has been brought prominently to the Subdivisional Officer's notice, and steps are now being taken which,

* Exclusive of the mandals working in the survey extension in the *Eastern Duárs*, who were also inspected by me. The work of a few non-cadastral mandals also came under inspection.

it is hoped, will result in a great improvement in this respect in the course of the current year. In some parts of Kámrúp sadr, the cultivation traced from the old maps is still frequently inked in without being tested on the ground, and it was again pointed out to the Deputy Commissioner that unless very heavy punishment invariably follows detection, this objectionable practice will never be stamped out. Measurements from corners of old fields are still common, especially in the tracts surveyed prior to 1886, in which theodolite stations were not demarcated permanently by the professional party. In Barpeta, I was glad to find that arrangements were being made to resurvey almost all the more fluctuating villages before the coming regular settlement. The testing of field measurements by the supervisor kanungos showed a general improvement since last year, but in some circles the work done was still insufficient.

Darrang.—There are 6 supervisor kanungos and 108 mandals in the cadastrally-surveyed area of this district. The papers of all the supervisor kanungos of the district and of the 25 mandals of the sadr subdivision, were inspected both by myself and the Superintendent of Land Records. Of the 83 mandals of the Mangaldai subdivision, the work of 82 was inspected by me, and that of 78 mandals by the Superintendent of Land Records. In the sadr subdivision, the work was very backward at the time of my visit. The condition of the theodolite station marks had improved since last year, but the necessity for erecting mounds to aid the mandals in their survey of new lands, had not received sufficient attention. The condition of the mounds and *simul* boughs indicating theodolite stations in the Mangaldai subdivision, continued to be very satisfactory. Faulty methods of survey were noticed in both the subdivisions, and the practice of inking in cultivation traced from the previous year's maps without testing it on the ground, although strictly forbidden by the rules, is still very prevalent throughout the district. The Deputy Commissioner's special attention was drawn to this point. The preparation of the crop statistics had not received much attention in Mangaldai.

Nowgong.—There are 8 supervisor kanungos and 151 mandals in the cadastrally-surveyed area of this district. Mr. O'Donel inspected the work of all the kanungos and 141 mandals, and I saw all the kanungos and 149 mandals. There was an improvement in many respects since last year, especially in the punctuality with which the supplementary settlement papers were submitted, and in the care taken over the crop statistics. In well cultivated tracts the condition of the survey marks was very satisfactory, but in jungly tracts many marks remained unvisited, and in some cases, all trace of them had been allowed to disappear. There was, on the whole, an improvement in survey methods during the year, and I noticed much more direct chaining between fixed points and much less building up of triangles and shots from distant points with the sight rule, than was the case when I inspected the maps last year. Cultivation traced from the maps of the previous year is still inked in in many cases without being tested on the ground; but this objectionable practice is less common than it was last year. The rule that traces should be prepared of all maps in which fluctuations of cultivation necessitate much plotting over printed lines is not always observed. The crop statistics were found to have been prepared with more care than in the previous year.

Sibsigar.—There are 9 supervisor kanungos and 193 mandals in the cadastrally-surveyed area of this district. Mr. O'Donel inspected the work of all the kanungos and mandals,* and I saw all the kanungos and 180 mandals. The condition of the theodolite stations showed a great improvement over last year. Much, however, remains to be done in jungly tracts and grants, where the marks have in many cases disappeared altogether. The survey methods of the mandals are still in most parts very unsatisfactory, and the rule that all cultivation traced from the old maps must be tested on the ground before being inked in is still very generally neglected. There seems to be reason for suspecting the existence of more concealed cultivation in parts of this district than in any other area which has been cadastrally surveyed. These defects are largely due to the want of proper supervision on the part of the supervisor kanungos. Many mistakes were found in the statistics showing the crops grown.

* All the kanungos and 166 mandals were seen twice by Mr. O'Donel.

Lakhimpur.—There are 3 kanungos and 46 cadastral mandals in this district. Mr. O'Donel inspected the work of all the kanungos and 45 mandals,† and I saw all the kanungos and 38 mandals. The work showed some improvement since last year, particularly in North Lakhimpur; in the sadr subdivision the improvement was less marked. The condition of survey marks showed a considerable improvement in both subdivisions. In North Lakhimpur there has been a distinct improvement during the year in the survey methods adopted by the mandals, and I noticed far more direct chaining between the fixed points and far less triangulation and surveying from

† All the kanungos and 39 mandals were seen twice by Mr. O'Donel.

the corners of *dhips* (earthen mounds) than was the case last year. In the sadr subdivision forbidden methods of survey are still resorted to. The maps are still coloured and inked up in a very untidy manner.

13. The statement below shows briefly the work done by the Sub-Deputy Collectors in the matter of inspecting village records during the year under report:

Inspections by Sub-Deputy Collectors.

District.	Subdivision.	Total number of mandals or *patwáris*			Number of mandals or *patwáris* whose		Remarks.
		In mauzas cadastrally surveyed.	In mauzas not cadastrally surveyed.	Total.	Papers examined and checked in cadastral and non-cadastral mauzas.	Maps checked (in cadastral mauzas).	
Sylhet ...	Karimganj ..	4	...	4	4	4	
Goálpára ...	Dhubri ...	15*	20	35	14	12	* In extension survey area.
Kámrúp ...	Barpeta ...	55	16	71	39	58	
	Gauháti ...	204	27	231	205	73	
Darrang ...	Mangaldai ...	83	4	87	87	23	
	Tezpur ...	25	30	55	55	20	
Nowgong ...	Nowgong ...	151	15	166	156	120	
Sibságar ...	Golághát ...	47	3	50†	50	6	† Exclusive of 6 mandals of Ahatguri.
	Jorhát ...	78	6	84‡	32	23	‡ Inclusive of 6 mandals of Ahatguri.
	Sadr ...	68	3	71	71	64	
Lakhimpur...	Dibrugarh ...	27	48	75	43	18	
	North Lakhimpur	19	14	33	33	24	
	Total ...	776	186	962§	789	445	§ This differs from the scale on the 1st April 1895, as shown in paragraph 9, owing to the fact that this statement shows the maximum number of men entertained at any time during the year.

The papers of all the mandals in the Mangaldai, Tezpur, Golághát, North Lakhimpur, and Karimganj subdivisions, were inspected during the year, and a fair amount of inspection was carried out in all other subdivisions, except Dhubri, Barpeta, and Dibrugarh. Dhubri and Barpeta were without a Sub-Deputy Collector for a considerable time; while at Dibrugarh the Sub-Deputy Collector was so fully employed in trying to get the work of his cadastral mandals into order, that he was unable to spend as much time as usual in the unsurveyed portions of the district.

14. Brief details of the inspection work done by the Deputy Commissioners and Subdivisional Officers are given in the following statement. Full particulars will be found in Appendix C:

Inspections by Deputy Commissioners and Subdivisional Officers.

Name of officer.	Designation.	Subdivision.	Supervisor kanungos.		Mandals					
					In cadastral area.			In non-cadastral area.		
			Total number.	Whose work inspected.	Total number.	Whose papers examined.	Whose maps checked.	Total number.	Whose work inspected.
Captain F. R. T. Gordon	Deputy Commissioner ..	Dhubri ..	1*	1*	19*	11*	13*	20	..
Babu Madhab Chandra Bardaloi ..	Extra Assistant Commissioner.	Barpeta ..	3	2	55	11	15	16	2
R. D. McCabe, Esq.	Deputy Commissioner ..	Gauhâti ..	11	..	104	6	6	27	2
H. E. Ransom, Esq. .. .	Assistant Commissioner ..	Mangaldai ..	4	..	83	..	..	4	..
	Ditto ditto ..	Ditto ..				35	..		
H. E. Ransom, Esq.	Offg. Deputy Commissioner	Tezpur ..	2	..	25	..	..	30	..
J. C. Arbuthnott, Esq.	Deputy Commissioner ..								
B. V. Nicholl, Esq.	Offg. Deputy Commissioner								
F. MacBlaine, Esq.	Deputy Commissioner ..	Nowgong ..	8	..	152	..	2	15	..
L. J. Kershaw, Esq.	Assistant Commissioner ..	Golâghât ..	2	2	47	12	..	3	2
Lieutenant H. W. G. Cole	Ditto ditto ..	Jorhât ..	4	4	78	66	3	6	2
C. W. E. Pittar, Esq. .. .	Deputy Commissioner ..	Sibsâgar Sadr ..	3	2	68	11	3	3	1
R. S. Greenshields, Esq.	Ditto ditto ..	Dibrugarh ..	2	..	27	..	..	48	6
F. C. French, Esq.	Assistant Commissioner ..	North Lakhimpur.	1	1	19	19	4	..	..
		Total ..	41	11	772	171	65	172	12

* Employed on the Bijni extension survey.

By far the best outturn is that of Mr. Cole, Subdivisional Officer of Jorhât, who inspected the work of all four supervisor kanungos and of 69 out of 78 mandals in the cadastrally-surveyed area. Mr. Lees, of Mangaldai, inspected the papers of 35 out of 83 mandals, and Mr. French those of his one kanungo and of all the 19 mandals employed in the cadastrally-surveyed area in the North Lakhimpur subdivision. Altogether, the papers of 10 out of 40 kanungos and of 160 out of 757 mandals in the cadastrally-surveyed area (excluding the men employed on the Bijni extension survey), were inspected by Deputy Commissioners and Subdivisional Officers. Last year only 7 kanungos and 115 mandals were inspected, so that the figures now reported show a considerable improvement. Apart from the actual inspection of the work of the land records staff, much depends on the action taken by district officers on the consolidated abstracts of the diaries of supervisor kanungos and mandals, which are put up weekly by the Sub-Deputy Collector with short marginal notes and suggestions. After orders have been passed by the district officers concerned, these abstracts are forwarded to me for perusal. It is impossible to show in tabular form the action taken on them, but there can be no doubt that district officers as a body are gradually realizing their importance as a means whereby the progress of settlement work may be watched from week to week, and in consequence devote much more time to them than they used to do.

15. The following statement shows the testing carried out by me and the staff under my immediate control during the past two years:

Testing by the Director of Land Records and the staff under his immediate control.

	Number of check lines.		Number of *kataus*.		Number of offsets.		Length of check lines in miles.		Remarks.
	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.	
Director of Land Records and Agriculture.	20	25	..	380	..	273	8·62	11·65	In extension survey area.
		24	..	264	..	315		9·40	In professionally-surveyed area.
Total	20	49	..	644	..	588	8·62	21·05	
Superintendent of Land Records ..	75	7	790	88	1,169	78	35·86	3·12	In extension survey area.
		75		650		1,119		33·99	In professionally-surveyed area.
Total	75	82	790	748	1,169	1,197	35·86	36·31	
B. C. Allen, Esq., on special duty with Director of Land Records.	..	15	..	160	..	73	..	5·38	In extension survey area.
		13		142		75		6·75	In professionally-surveyed area.
Total	..	28	..	302	..	148	..	12·13	
Babu Rájkumár Ráy, Temporary Sub-Deputy Collector.	..	24	..	267	..	229	..	12·48	In extension survey area.
„ Hirendra Kumár Ghosh, Temporary Sub-Deputy Collector.	..	19	..	327	..	368	..	11·89	
„ Rám Kumár Aditya, Temporary Sub-Deputy Collector.	..	44	..	577	..	863	..	21·74	In professionally-surveyed area.
Grand total	95	246	790	2,585	1,169	3,393	44·48	115·53	

Altogether, 115½ miles of check line were run against 44½ miles last year. The increase was chiefly due to the recent arrangement under which selected candidates for Sub-Deputy Collectorships are placed under my orders during the cold weather. They are required to accompany me and the Superintendent of Land Records in camp, and, in addition to assisting in examining the mandals' papers and maps in office, they are sent off to run lines wherever an examination of the maps shows that testing in the field would be desirable. The three men shown in the above statement did not join until about the beginning of March, but enough was seen of their work to make it clear that not only will the scheme bear fruit in giving selected candidates a thorough training in the duties of a Sub-Deputy Collector, and in teaching them to form a high standard of industry and activity, but also that it will materially increase the efficiency of the inspections carried out by me and the Superintendent of Land Records. Mr. Allen, a junior Assistant Commissioner, was deputed to my camp for a period of about six weeks with a view to giving him a practical training in the system of survey and settlement adopted in tracts which have been cadastrally surveyed. He accompanied me during my tour through Nowgong, Darrang, and the sadr subdivision of Kámrúp; and in addition to testing the mandals' field measurements by 12½ miles of check line, he helped me greatly in the examination of their office work.

16. Full particulars of the testing done by Sub-Deputy Collectors will be found in Appendix D. Check lines run independently and those run with other officers, have been shown separately.

Testing by Sub-Deputy Collectors.

Babu Bholá Náth Dás, of Gauháti, ran the greatest length of check lines in the surveyed area—54·16 miles. Next come Babu Rajani Kánta Bardalai, of Barpeta, and Babu Phanidhar Chaliha, of Sibságar, the former having run 46·12 (44·67 at Barpeta and 1·45 at North Lakhimpur), and the latter 45·49 miles. Babu Rádhá Mohan Dás, of Nowgong, and Babu Krishna Chandra Chaudhuri, of Tezpur, ran 34·49 and 31·07

miles, respectively. Babu Jainesvar Dás Gupta, of Mangaldai, was hampered in his testing work by having to survey himself more than 8,000 acres of land applied for under section 1 of the Settlement Rules. The outturn of testing in the Jorhát and Golághát subdivisions was very small, which is partly accounted for by the fact that the Sub-Deputy Collectors of these subdivisions were away at the survey camp during the whole of the cold weather. Munshi Didar Uddin, however, should have done more work than is shown against his name during the mandals' hot-weather tour in April, May, and June.

Taken as a whole, Sub-Deputy Collectors ran 330 miles of check line against 261 miles in 1893-94. The highest outturn of testing in unsurveyed areas is reported by Maulvi Muhammad Sádir, of North Lakhimpur (529 acres), and Babu Rajani Kánta Bardalai, of Barpeta (380·82 acres). The latter officer discovered the largest amount of concealed cultivation (36·03 acres).

Testing by supervisor kanungos.

17. The testing done by supervisor kanungos is shown in detail in Appendix E. The greatest length of check lines (88·77 linear miles) was run by Bhagirath Deka, of Raha, in Kámrúp, who also headed the list last year. Next to him comes Gangá Rám Dás, of Tezpur, who ran 73·60 miles. Sáháb Uddin Ahmad, of Baijáli (Kámrúp), Basir Ali Biswás, of Barpeta, and Sib Náth Sarma, of Raha (Nowgong), ran 72·38, 71·70, and 65·24 miles, respectively. As stated last year, the amount of testing required varies with the area of fluctuating cultivation, so that the same length of check line is not required in the permanent circles of Tezpur sadr, Dibrugarh, and Sibságar (excluding the Májuli), as in circles where the cultivation is very fluctuating. The largest area of fluctuating cultivation lies in Basir Ali's circle (Barpeta, Kámrúp), where his testing gives an outturn of 3·58 linear miles per square mile of fluctuating cultivation.

The total length of check lines run by supervisor kanungos aggregates 1,725 miles against 1,436 miles in 1893-94. Much care was given during the year to the manner in which the supervisor kanungos carried out their test measurements, and detailed instructions were issued for their guidance, showing what action should be taken by them with a view to the correction of discrepancies brought to light by their check lines. During my tours, I made a point of comparing as many traces as possible of lines run by them with the village maps, and was glad to find that, on the whole, these instructions had been fairly well acted up to. A tendency was, however, noticed on the part of some supervisor kanungos to shirk running lines in villages where the presence of tree jungle, or other obstructions rendered testing difficult, and to bring up the tale of work done by running an unnecessary number of lines in a few villages where testing was unusually easy. The necessity of chaining direct between fixed points was also not sufficiently borne in mind by all supervisor kanungos. These defects have been mentioned in my inspection notes wherever they came to light.

There is a tendency, in some districts, to employ supervisor kanungos on work which does not fall within the scope of their duties, such as reporting on cases and surveying land required for the railway. Where this appeared to be the case, the attention of the district officer concerned has been invited to the matter in my inspection notes.

Testing by tahsildars, mauzadars, &c.

18. The testing work done by tahsildars is shown in Appendix F, and that by mauzadars and tahsil muharrirs in Appendix G. Amongst tahsildars, Babus Uday Chandra Barua, of Hájo, and Rádhá Náth Barua, of Rangia, ran the greatest length of check lines, *viz.*, 20·31 and 20·27 miles, respectively. Cheni Rám Dás, of Barama, comes next with 17·88 miles, but this officer showed such an inadequate knowledge of surveying when I examined him, that it seems nearly impossible that he should have even attempted to carry out this amount of testing. Babu Kesav Chandra Singh, of Raha, only ran 10·45 miles against 41·66 shown against his name in last year's return. This officer, however, continues to take great interest in settlement work; and so far as settlement work is concerned, he is perhaps as good a tahsildar as any in the province. Babu Káli Rám Chaudhuri, of Chaygáon, measured up the largest area of unsurveyed land (971 acres). Munshi Muhammad Eunas Ali, of Gauháti, tested 541 acres in the same way. Babu Paramánanda Chaudhuri, of Támbulpur, found out the largest area of incorrect classification.

Amongst mauzadars and tahsil muharrirs, those of Barpeta did most testing with check lines (29·16 miles), and those of Dhubri the largest amount of testing in non-cadastral areas (1,954 acres).

19. The net results of the testing carried out during the last two years by Deputy Commissioners and Subdivisional Officers, are given in the following statement:

Testing by Deputy Commissioners and Subdivisional Officers.

District.	Subdivision.	Testing by check lines.						Testing without check lines.			
		Total area surveyed up to		Total area of fluctuating cultivation.		Linear miles of check line run.		Total area unsurveyed in		Area tested.	
		1893-94.*	1894-95 †	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.
1	2	3	4	5	6	7	8	9	10	11	12
		Square miles.	Square miles.	Acres.	Acres.			Square miles.	Square miles.	Acres.	Acres.
Goálpára ..	Dhubri	..	..	..	9,078	..	8·15‡	2,384·00	2,384·00	108	..
	Goálpára	..	..	..	..	..	..	1,570·00	1,570·00	..	..
Kámrúp ..	Barpeta	440·21	430·38	24,095	31,373	3·88	10·36	785·79	735·42	241	254
	Gauháti	1,326·61	1,378·30	45,599	35,854	..	..	1,058·39	1,038·70	..	..
Darrang ..	Mangaldai	657·09	677·12	14,306	8,107	3·14	..	585·46	565·43	56	..
	Tezpur	213·10	213·10	4,413	6,641	..	..	1,959·90	1,959·90	..	..
Nowgong ..	Nowgong	1,036·13	1,080·91	26,787	35,744	..	0·66	2,224·32	2,179·54	..	..
Sibságar ..	Golághát . ..	343·74	334·29	6,340	5,055	..	..	591·26	580·80	..	..
	Jorhat	649·95	674·29	14,425	5,806	3·52	6·74	308·05	243·61	..	..
	Sibságar Sadr	621·99	634·73	14,997	6,107	3·31	1·43	368·01	335·97	5	..
Lakhimpur ..	Dibrugarh	189·19	189·19	1,945	1,998	..	..	2,373·81	2,373·81	9	..
	North Lakhimpur ..	80·06	80·06	1,922	2,378	1·12	2·07	1,080·94	1,080·94	108	..
	Total	5,558·07	5,772·38	149,828	139,288	12·77	29·41	15,269·93	15,033·42	527	254

* This excludes the area surveyed by local agency in different districts during the year 1893-94.
† Ditto ditto during the year 1894-95.
‡ These figures relate to the extension survey of 1891-95.

The total length of check lines run by district officers is 29·41, or more than double the length run in any previous year. The total, however, is still far smaller than it should be, and all, except about 3½ miles, is due to the testing done by three officers, *viz.*, Babu Mádhav Chandra Bardalai, Subdivisional Officer of Barpeta (10·36 miles), Captain Gurdon, Deputy Commissioner of Goálpára (8·15 miles), and Lieutenant Cole, Subdivisional Officer of Jorhát (6·74 miles). The district officers of the Gauháti, Mangaldai, Tezpur, Golághát, and Dibrugarh subdivisions ran no check lines.

Year.	Length of check lines, in miles.	Area tested without check lines, in acres.
1885-86	...	2,770
1886-87	...	4,485
1887-88	...	2,954
1888-89	8·57	2,659
1889-90	1·84	3,539
1890-91	...	1,436
1891-92	7·29	390
1892-93	13·25	418
1893-94	12·77	527
1894-95	29·41	254

The only testing carried out in unsurveyed tracts is by Babu Mádhav Chandra Bardalai, who measured up 254 acres. The settled area which remains unsurveyed is yearly becoming more restricted; but there are still many tracts in which some testing by district officers would be most useful. Figures showing the testing carried out by Deputy Commissioners and Subdivisional Officers during the past ten years, are given in the margin.

20. In the following statement, the total testing done in the cadastrally-surveyed area by means of check lines is compared with the total area of fluctuating cultivation:

Total testing done.

District.	Subdivision.	Number of linear miles of check lines per square mile of fluctuating cultivation.					
		By Director of Land Records and the staff under his immediate control.	By Sub-Deputy Collectors.	By supervisor kanungos.	By tahsildars and mauzadars, &c.	By District Officers.	Total.
Kámrúp ...	Barpeta	...	0·46	2·66	0·85	0·21	4·18
	Gauháti	0·07	0·78	0·45	1·61	...	8·91
Darrang ...	Mangaldai ...	0·23	1·88	0·40	2·19	...	13·70
	Tezpur	0·28	2·99	5·17	1·70	...	10·14
Nowgong ...	Nowgong	0·73	0·37	6·85	0·33	0·01	8·29
Sibságar ...	Golághát ...	0·68	0·75	4·79	0·58	...	6·80
	Jorhát	1·11	0·58	8·97	0·73	0·39	11·78
	Sadr	0·19	2·05	3·16	0·61	0·14	6·15
Lakhimpur ...	Dibrugarh ...	...	7·53	7·19	...	...	14·72
	North Lakhimpur ...	0·80	3·98	10·90	0·59	0·58	16·85

This statement is more accurate than the corresponding one given in paragraph 20 of last year's report, as it excludes lines run by subordinates in company with superior officers. All check lines run in the areas surveyed during the year by local agency have also been excluded. It must, however, be borne in mind that even now the proportional figures are vitiated by the fact that many lines are included which have been run through cultivation traced from the maps of the previous year, which does not come within the definition of fluctuating, but in which testing has to be carried out in order to check the tendency of the mandals to ink in the boundaries on their new maps without first verifying them on the ground.

The proportional figures showing the testing by Sub-Deputy Collectors are lowest in Barpeta and Nowgong, but this is chiefly due to the fact that these subdivisions contain an exceptionally large amount of fluctuating cultivation. The actual amount of testing done by them is considerably larger than that done by the Sub-Deputy Collectors of some of the subdivisions of Upper Assam, where the high figures are explained by the comparatively small amount of fluctuating cultivation.

The relatively small proportion of testing by the supervisor kanungos in Barpeta is due partly to the large area of fluctuating cultivation, and partly to the large amount of extension work which they had in hand. The return will be better this year, as the area taken up in extension during the current season has been restricted, so as to allow them to devote more time to testing in the area already surveyed. The figures for Golághát and Sibságar sadr, although higher, are, in reality, far less satisfactory, and the actual amount of testing carried out by the supervisor kanungos is considerably less than it should have been.

Testing of office work.

21. The foregoing paragraphs refer chiefly to the testing of the mandals' field work. It is, however, not sufficient that the survey of the fields should be correctly carried out; it is equally necessary that all fields shown in the map should be posted in the *dágchitha*, and their area correctly calculated; that all fields entered in the *dágchitha* should be posted in the *jamábandi*, and the revenue due on them accurately worked out, &c., &c.*

In Rule 93 of the Rules for the proper maintenance of settlement maps and records, it is provided that the supervisor kanungo must test 10 per cent. of the work of old and experienced mandals, and 20 per cent. of that of new men. But many supervisor kanungos fail to carry out the prescribed amount of testing, and at my inspections I have in many cases found the area calculations to be far from accurate.

In order to keep the supervisor kanungos up to the mark in this respect, it is necessary that their work should be closely supervised by the Sub-Deputy Collector at settlement time, and that the same officer should take every opportunity, both in office

* As has frequently been pointed out, the settlement in the Assam Valley districts is practically an annual one.

and on tour, of examining the mandals' papers himself, with a view not only to testing their correctness, but also to see how far the supervisor kanungos have worked up to the standard of testing laid down in the rule quoted above. In paragraph 14 of last year's report, I said that in my opinion a great deal of useful work might be done by district officers themselves, and this view was endorsed by the Chief Commissioner in paragraph 3 of his Secretary's letter No. 220Agri.—4621R., dated the 4th October 1894, to my address. The set of questions to be used as a guide in inspecting the mandals' work in office which was referred to last year as under preparation, was issued, with the Chief Commissioner's approval, with this office Circular No. 15, dated the 4th September 1894. The number of mandals whose papers have been tested during the year under review, has been shown in paragraph 14 above.

I also noted in my last report (*vide* paragraph 18) that tahsildars might do more in the way of supervising their mandals' office work than they have hitherto done. When their field work is over, the mandals are required to assemble at the tahsil office to write up their settlement papers.* The tahsildar is, therefore, in a position to maintain a close personal supervision over their work; and as he has no revenue collections to occupy his time while the writing up of the papers for the regular settlement is in progress, there is no reason why he should not devote several hours a day to seeing that the supervisor kanungo attached to his tahsil is working properly, and to carrying out a considerable amount of testing himself. The average number of mandals in a tahsil is about 20, and the duration of their office work is seldom less than three months. Consequently, the tahsildar aided by his two muharrirs could devote some hours a day for at least three days to testing the work of each mandal; and, if he would only do this, there can be no doubt that the accuracy of the area and revenue calculations and of the mandals' office work generally would be brought up to a very high standard of accuracy. Tahsildars might with advantage be required to submit a weekly diary during the period referred to, showing the amount of testing carried out by them daily.

* These are the orders, but the mandals are rather inclined to shirk them and do their work at home. An attendance register might perhaps be prescribed with advantage.

22. The areas contained in each supervisor kanungo's circle, including villages surveyed in extension up to the close of 1893-94, are shown in Appendix H. A few minor changes in the distribution of mandals' circles were made during the year, and the supervisor kanungos' circles in the sadr subdivision of Sibságar were re-arranged, so as to make their boundaries coterminous with the tahsils which have been created there.

Circles of supervisor kanungos and mandals.

The Jaintia parganas, comprising an area of 483·98 square miles, having been cadastrally surveyed prior to settlement, proposals were drawn up by me, in consultation with the Deputy Commissioner and Settlement Officer, for the entertainment of a staff of kanungos and *patwáris* to keep the survey maps and records up to date.† These proposals have been sanctioned by the Chief Commissioner,‡ and men have been selected for the different appointments. The scheme provides for the entertainment of 4 supervisor kanungos (who will be borne on the provincial list) and 52 *patwáris*. Three grades of *patwáris* have been sanctioned on a pay of Rs. 8 for the third, Rs. 9 for the second, and Rs. 12 for the first, grade, the proportion of men in each grade being 50, 30, and 20 per cent., respectively, as in the case of the Assam Valley mandals. Promotion to the higher grades will depend on approved work and the possession of certain survey qualifications; all the men appointed have been placed, in the first instance, in the lowest grade.

† Letter No. 5231, dated the 3rd December 1894, to the Secretary to the Chief Commissioner.

‡ Letter No. 148Survey—227R., dated the 23rd January 1895, from the Secretary to the Chief Commissioner.

The average areas of a supervisor kanungo's and a *patwári's* circle in Jaintia are compared with those in the Assam Valley below:

Class of officer.	Settled area, in *bighas.*				Unsettled waste, in *bighas.*		Total, in *bighas.*	
	Ordinary tenures.		Grants, permanently-settled, *lákhiráj* or *nisf-khiráj* estates.		Assam Valley.	Jaintia.	Assam Valley.	Jaintia.
	Assam Valley.	Jaintia.	Assam Valley.	Jaintia.				
Mandals or *patwáris*	5,311	11,733	1,877	1,000	7,397	5,273	14,585	18,026
Supervisor kanungos	100,497	152,789	35,483	13,000	139,973	68,549	275,957	234,338

23. The condition of survey marks, as reported by the district authorities, is shown in Appendix I. An abstract is given below:

Condition of survey marks.

	Classification.	Total number (6+7+8).	Total number found in good order by mandals.	Total number found not in good order by mandals.		Total of columns 4 and 5, or total in good order on 31st June 1894.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
Total for the province.	Prisms ...	11,897	11,117	593	30	11,710	157
	Jungle mounds ...	2,481	1,752	386	110	2,138	233
	Simul boughs ...	62,579	25,478	28,777	5,710	54,255	2,614
	Kanungos' *dhips* (mounds)	3,764	2,296	1,242	195	3,538	31
	Brick prisms ...	31	31	...	...	31	...
	Grand total ...	80,752	40,674	30,998	6,045	71,672	3,035

Traces on the scale of 2 inches to the mile have now been prepared, showing all survey marks, each mark being separately numbered, and the figures showing the total number of marks of each kind; and the numbers in repair are consequently more accurate than they were formerly. Each mandal is supplied with a trace showing all survey marks for his circle, which he is required to keep pinned into his diary book. When he visits or repairs a mound he is required to enter its number in his diary; and it is thus more difficult than it used to be for him to submit false returns. The condition of the theodolite station marks seen by me, the Superintendent of Land Records, and the Sub-Deputy Collectors, is shown below:

District or subdivision.	Inspected by Director of Land Records and Agriculture.			Inspected by the Superintendent of Land Records.			Inspected by Sub-Deputy Collectors.			Total number inspected.		
	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.
Barpeta ...	49	43	87·75	...	...	...	210	77	36·66	259	120	46·33*
	...	...	...	...	...	...	145	145	100·00	145	145	100·00†
Gauhati ...	50	41	82·00	...	...	...	242	219	90·49	292	260	89·05*
	...	...	...	...	...	...	79	40	50·63	79	40	50·63†
Mangaldai ...	180	170	94·44	...	...	...	211	174	82·46	311	344	87·88*
	7	7	100·00				10	10	100·00	17	17	100·00†
Tezpur ...	108	98	90·74	...	...	...	499	477	95·59	607	575	94·72*
	123	119	96·75				110	110	100·00	233	229	98·28†
Nowgong ...	113	95	84·07	301	277	70·84	613	555	90·54	1,117	927	82·99*
	...	...	...	...	...	...	131	91	69·46	131	91	69·46†
Golaghat ...	50	44	88·00	285	207	72·63	269	228	84·76	604	479	79·37*
	...	...	...	...	...	...	4	...	...	4	...	... †
Jorhat ...	321	283	88·16	374	295	78·87	45	34	75·55	740	612	82·70*
	...	...	...	6	4	66·66	48	46	95·83	54	50	92·59†
Sibsagar sadr ...	98	92	93·87	367	314	85·55	836	704	84·21	1,301	1,110	85·31*
	26	21	80·77	16	14	87·50	236	211	89·40	278	246	88·48†
Dibrugarh ...	84	79	94·04	71	53	74·64	788	590	74·87	943	722	76·56*
North Lakhimpur ...	28	25	89·28	109	87	79·81	853	683	80·07	990	795	80·30*
Total	1,237	1,117	90·29	1,619	1,251	77·26	5,329	4,394	82·45	8,185	6,762	82·61

* In cadastrally surveyed area. † In extension survey area.

From this it would appear that out of 8,185 stations visited, 6,762, or 82·61 per cent., were marked by growing or by newly-planted boughs, against 76·43 per cent. in the previous year.

Advances and recoveries on account of demarcation work in connection with cadastral survey operations.

24. Statement J in the Appendix shows the advances and recoveries made up to the 31st March 1895 on account of demarcation work in connection with cadastral survey operations in each district. These advances have been grouped under three main heads, namely—

(1) demarcation of village trijunction points in the areas surveyed by the professional party ;

(2) demarcation of such points in the areas surveyed by local agency ; and

(3) demarcation of grants, permanently-settled, *lákhirái* (revenue-free), and *nisf-khirái* (half revenue-paying) estates.

As regards (1), all expenditure has ceased in the Assam Valley and Prabhágarh and the recovery of the advances already made is in progress. A sum of Rs. 3,432 has been recovered since the 1st April, and it is anticipated that the whole of the balance outstanding will have been realised before the close of the current year. In Jaintia the work of demarcating survey marks has nearly been completed, and steps will shortly be taken with a view to the recovery of the cost incurred. In Cachar the work is still in progress, and the question of recovering the advances made will not arise for some time to come.

The prisms required for the demarcation of village trijunctions in the areas surveyed by local agency in the Assam Valley have been ordered, and work will be commenced next season. The demarcation of grants, &c., in the Assam Valley and Jaintia is also in progress ; but under the Chief Commissioner's recent orders,* this subject will in future be noticed in the special Survey and Settlement Report, and not in the Annual Departmental Report.

Extension survey.

25. A separate report has recently been submitted (*vide* this office letter No. 214, dated the 18th January 1895), in which the results of survey operations by local agency up to the close of season 1893-94 were reviewed, and the programme laid down for the current season was described. The subject will, therefore, be dealt with very briefly here. The final result of the operations of season 1893-94 was the survey of 234.51 square miles. The increase in settled area brought out by the survey was 9,228 *bighas*, or 8·82 per cent., the increase in revenue amounted to Rs. 6,237. or 12·89 per cent. The cost of the operations was only Rs. 4,477, or considerably less than the gain in the revenue for a single year.

During the current season about 209 square miles have been taken up for survey, but figures showing the results are not yet available.

The only new departure in the current season's programme is the commencement of the survey of the Eastern Duárs, in the Goálpára district, where a tract of 56·88 square miles was taken up, and all field work was practically completed by the end of March. This result, which was attained in the absence of a Sub-Deputy Collector, is largely attributable to the close personal supervision maintained by the Deputy Commissioner, but much credit is also due to Babu Nibáran Chandra Mukherji, the tahsildar of Bijni, and to the supervisor kanungo, Laghanu Rám Dás, whom I had specially selected for the work.

The total area surveyed by local agency up to date amounts to nearly 800 square miles, or a full season's work for the professional survey party. The total cost is between Rs. 15,000 and Rs. 16,000, or considerably less than a sixth of that of the last season's work of the professional party in the Assam Valley ; it must, however, be remembered that, although the total area surveyed exceeds that done by the professional party in 1891-92, the settled area is barely half of that in the tracts which were then surveyed.

Registrar kanungos.

26. The offices of all the registrar kanungos in the Assam Valley Proper were inspected by me and also by the Superintendent of Land Records. The duties defined in Part V of the Rules for the maintenance of settlement maps and records, are now, as a rule, carried out well. The only exception is in the case of the instrument registers, which are not yet clearly understood. Instructions have recently been issued (Circular No. 6, dated the 1st May 1895) explaining in detail how these registers should be kept up.

The second copy of the periodic *jamábandi* is now kept by the registrar kanungo as laid down in Notification No. 6174R., dated the 11th August 1893, except in Nowgong, where the *jamábandi* relating to tahsils are still kept in the tahsil offices.

* Paragraph 9 of the Chief Commissioner's Resolution No. 3Survey – 1472R., dated the 3rd May 1895, on the Report on Survey and Settlement Operations for the year ending the 30th September 1894.

The correction of the record, in accordance with the orders passed in mutation cases, is carried out fairly well, but the revised rules on the subject, which were issued with the Secretary to the Chief Commissioner's Circular No. 44R., dated the 4th December 1894, have not yet been given effect to in the Gauháti, Goálpárá, and Sibságar offices. In order to ensure the keeping up to date of the record of rights, the new Rules for the maintenance of settlement maps and records provide (Rule 35) for the submission annually by the mandals (each for his own circle) of lists showing unregistered transfers; and in the Secretary to the Chief Commissioner's Circular No. 9R., dated the 6th March 1895, district officers have been requested to enforce the institution of registration proceedings by the persons named in these lists, by the issue of notices under section 58 of the Land and Revenue Regulation.

II.—ANALYSIS OF DISTRICTS WITH REFERENCE TO SECURITY AGAINST FAMINE.

Famine unknown in Assam.

27. There is very little to state under this head beyond what was said in paragraph 27 of the Report for 1883-84. Famine is unknown in Assam, and there is no tract which can be classed as insecure. There is an occasional failure of crops due to floods, such as occurred last year in a few places (*vide* paragraph 28 of my last report), and a good deal of damage is also sometimes caused by hailstorms, changes in the course of rivers and (more rarely) locusts. But these calamities are rare, and the loss occasioned by them is seldom or never sufficient to cause much distress, or even to render the payment of the revenue an unbearable burden. In the year under review, a small area in Kámrúp was much damaged by a change in the course of the Paglá Diá river, which lowered the level of some fields and caused others to be silted over with sand; but such is the general prosperity of the people in the neighbourhood, that only a small portion of the lands thus damaged has been resigned; most of the holdings are being retained by the lessees, in the hope that they will, in course of time, again become fit for cultivation. A few of the poorer class of cultivators have, however, suffered severely, and have applied for remission of revenue, but I am not aware of the result of their applications. A somewhat similar case occurred in the Mangaldai subdivision, where the Rotá river, in changing its course, has entirely destroyed one of the villages situated on its banks.

In the Gáro Hills, during the last two years, there has been some slight distress owing to the failure of the cotton crop, and advances aggregating Rs. 2,400 have been made to the more indigent cultivators.

III.—SYSTEM OF COLLECTION OF REVENUE AND RENTAL IN PRECARIOUS TRACTS.

[*Nil.*]

IV.—MEASURES OF PROTECTION.

Bunds.

28. As stated in paragraph 27 of the report for last year, this subject is not a very important one in this province. During the year under review, part of the Dihing bund, in Sibságar, was renewed, and the bund on the bank of the Nanai river, in Mangaldai, was lengthened and repaired.

Irrigation.

29. There are no large irrigation works in the province, and as the water-supply is ample, no such works are needed. But in submontane tracts, especially in the Duárs of Goálpára, Kámrúp, and Mangaldai, where the soil is sandy and the slope of the land is considerable, numerous small irrigation works are carried out by the cultivators themselves, who join together to cut channels (known as *dungs*) to bring water to the fields on which *pharma* or *kharma* (a kind of transplanted early rice) is grown.

V.—AGRICULTURAL EXPERIMENTS.

Crop experiments.

30. The annual Note on the Crop Experiments is submitted separately every year. The results of the crop experiments are now being kept in ledger form, with a view to the preparation of the quinquennial return, which will have to be submitted in 1897.

31. The small Government plantation of Malta oranges, lemons, and citrons, near Theriághát, was kept clear of jungle and properly looked after. Out of the total number of trees, 25 citron and 4 lemon trees bore fruit, and one lemon and 5 citron trees died during the year. About 500 citrons were gathered from the plantation and were brought to Shillong for sale, but the cost of placing the fruit on the market exceeded their selling price. I have asked the Deputy Commissioner in future to arrange to sell the fruit on the trees in order to avoid a recurrence of this unsatisfactory result.

Citron plantation.

32. Some cocoons supposed to be of the *Deomuga* (*Bombyx religiosa*) silk-worm, which were despatched to Mr. John Ruston, of Nottinghamshire, England, last year, having turned out to be cocoons of the *muga* or cultivated silkworm, several attempts have been made to procure genuine *Deomuga* cocoons, but all efforts to procure them have been unsuccessful up to date.

Supply of silk cocoons to other countries.

In January 1894, an application for a supply of some *eri* cocoons was received from the Director of Land Records, North-Western Provinces and Oudh, and 60 live cocoons were despatched to him; these were found to be dead on arrival, and so a second consignment was sent. The result was again unsatisfactory, and a third supply was then sent. The same officer was also supplied with 6 ounces of *eri* silkworm seed.

An application received from the Economic Reporter to the Government of India for a supply of 50lbs. of *eri* cocoons in order to enable Mr. Otto Auz (a silk expert) to experiment with his process of reeling and spinning silk, was also complied with.

33. In May 1894, a few seeds of a new cotton, supplied to the Government of India by the British Agent and Consul General, Cairo, were received for experiment, through the Reporter on Economic Products. These seeds were made over to the Deputy Commissioner of the Gáro Hills, the chief cotton-producing district in the province, who distributed them in several localities. The experiments, however, did not prove a success, the explanation suggested by the Deputy Commissioner being that a drier climate and richer soil than are found in the Gáro Hills are needed for the successful cultivation of the cotton in question.

Cotton seeds.

An application from the Director of Land Records, North-Western Provinces and Oudh, for 10lbs. of seed of the Gáro Hills cotton was complied with.

VI.—CATTLE.

34. The following statement shows the number of deaths among cattle as reported from the several districts of the province during the past two years:

Cattle-disease.

1	2		3		4		5		6		7		8		9		10	
District.	Rinderpest.		Foot-and-mouth disease.		Swelling of mouth and throat.		Diarrhœa, dysentery, and cholera		Anthrax.		Catarrh.		Other diseases.		Total.		Estimated value of cattle.	
	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.
																	Rs.	Rs.
Cachar	35	18	...	1	301	283	859	1,129	...	60	...	3	30	8	1,225	1,502	32,405	30,739
Sylhet	7,354	2,707	1,557	3,858	2,102	5,911	12,849	4,813	...	339	600	1,160	14,448	6,218	38,900	24,044	404,351	216,869
Goálpára	264	287	2,436	1,869	2,177	3,129	8,104	2,640	96	69	407	1,324	9,267	4,584	19,747	13,497	243,838	141,445
Kámrúp	3,735	8,736	11,651	16,411	...	...	12,621	15,500	...	...	...	...	10,504	13,063	37,041	45,051	2,65,600	361,200
Darrang	...	...	101	362	82	71	247	335	...	8	14	...	4,351	2,986	4,745	7,903	93,894	75,001
Nowgong	...	...	...	...	...	...	13,043	10,078	...	...	...	...	2,540	3,858	16,582	13,936	1,16,074	90,352
Sibságar	...	114	2,260	1,731	1,098	901	15,458	9,228	86	272	36	17	3,467	2,590	23,335	17,023	2,61,798	2,73,694
Lakhimpur	2,360	...	3,494	...	...	...	...	737	...	...	...	...	3,460	4,988	10,330	5,725	1,03,300	57,250
Nága Hills*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Khási and Jaintia Hills† ...	150	...	16	...	...	...	...	...	...	...	...	...	...	...	166	...	1,575	
Gáro Hills	259	...	...	...	...	...	...	...	...	...	...	...	128	...	128	259	1,557	3,892
Total	14,648	12,311	20,830	23,318	6,660	9,295	60,210	43,523	176	748	1,147	2,509	47,233	39,302	152,903	137,022	14,21,677	12,50,217

* The Deputy Commissioner is unable to furnish statistics.
† The Deputy Commissioner, Khási and Jaintia Hills, kept no statistics for 1893-94, as no epidemic diseases made their appearance during that year.

Although there was a slight increase in the number of deaths among cattle in the district of Cachar, there was no outbreak of disease in an epidemic form. The decrease in the estimated value of the animals that died is accounted for by there having been fewer deaths amongst buffaloes.

The figures for the Goálpára district do not differ greatly from those of the previous year; the largest number of deaths was reported from the Agiamani police station.

In Kámrúp, the mortality was exceptionally heavy; disease prevailed throughout the year, but was particularly virulent during the months of May, June, November, and December. In the other plains districts of the province, the reported mortality shows a decrease, but it is doubtful how far the figures can be relied upon. In Sibságar, at least judging from general information derived from other sources, it seems probable that the mortality was heavier than in the preceding year.

The statistics from the hill districts are admittedly imperfect, and there is nothing to be gained from a consideration of them.

The classification of diseases is still untrustworthy, but it is hoped that it will be more accurate in future years. A short description of the different diseases was circulated to district officers in November last, and they were asked to report the vernacular names by which each disease is locally known. The required information has now been received, and steps are being taken to ensure the use of the proper English equivalents in future returns.

Breeding bulls.

35. The two Kenwári bulls were stationed, as in the previous year, at Sibságar and Gunjong, respectively. The details as to the cost of keep and work done by the bulls are given in the statement below:

District.	Wages of keeper.	Cost of food.	Miscellaneous.	Total.	Number of successful coverings during 1894-95.			Total for 1893-94.
					Male	Female.	Total.	
	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.				
Cachar ...	24	52 2 0	...	76 2 0	3	10	13	23
Sibságar ...	96	78 7 3	...	174 7 3	...	...	...	2
Total ...	120	130 9 3	...	250 9 3	3	10	13	25

The result is most unsatisfactory, the reason in the case of the North Cachar animal being that it is now too old for work. In Sibságar, as noticed last year, there is a prejudice against putting cows to the bull stationed there, owing to the belief that greater danger attends parturition, and that the offspring require a larger quantity of milk than ordinary country calves. It seems useless to replace these animals by others of the same breed, as they are undoubtedly too heavy for the small and weedy cattle of this province; but at the same time, in view of the excellent grazing grounds available in parts of the sparsely-populated hill districts, it seems a pity that Assam should continue to be dependent on Bengal for its cart bullocks.

The Kácháris of North Cachar and some Nepalese settlers in the Khási Hills already carry on a profitable business in breeding buffaloes for sale to the people in the plains, and it is probable that the breeding of cattle would also prove remunerative if a suitable strain could be introduced; enquiries are being made with a view to ascertain what class of bulls would be most suitable for the purpose, and separate proposals will be submitted in due course.

No record is kept of the work done by the four surviving Kenwári bulls owned by private individuals in the Mangaldai subdivision.

VII.—AGRICULTURAL AND FISCAL STATISTICS.

Agricultural and fiscal statistics.

36. These are comprised in Return No. 41B, and are submitted separately every year.

VIII.—TRADE AND TRADE STATISTICS.

Trade Reports.

37. The Annual Report on the River-borne Trade of the province was issued on the 3rd August 1894, and a Note on Foreign Trade was drawn up for incorporation in the Annual Provincial Administration Report of the province. Quarterly Reports dealing with the River-borne Trade were also issued regularly. A new and more suitable site was selected for the Bhairab Bázár Traffic Registration Office, and the funds were provided for the purpose of acquiring it.

IX.—MISCELLANEOUS.

Miscellaneous.

38. The following subjects are noticed in this report, in accordance with the orders of the Government of India, or the Local Government, issued from time to time.

Fuel and fodder reserves.

39. Except in low-lying places, chiefly in Sylhet, where the grazing grounds go under water during the rains, there is scarcely any part of the province where the supply of fuel and fodder is insufficient. In a few of the more thickly-populated tracts, complaints have occasionally been made that the opening out of tea gardens has restricted the area available for the grazing of the village cattle; but so far, there does not seem to be much real ground for these complaints. The question whether it would not be desirable in such tracts to mark off parts of areas, still unsettled, as grazing grounds, and reserve them from settlement, is under enquiry.

Bones as manure.

40. As stated in previous reports, bones are never used in Assam as manure, except (rarely) by tea-planters, and there is no export or import trade worth mentioning in this commodity.

Locusts.

41. The appearance of locusts is rare in this province. No ravages of these insects were reported during the year.

Insect pests.

42. As in the previous year, specimens of a few species of insects reported to be doing damage to crops were forwarded to the Deputy Superintendent, Indian Museum, and the results of his examination have been noted. Mr. N. G. Mukherji's notes on "Insect and Fungus Parasites" and "Prevention of white maggots in mangoes," with Assamese and Bengali translations, were reprinted and distributed to the district officers. It was arranged by the Government of India with the Trustees of the Indian Museum, that Mr. E. C. Cotes, the Entomologist of the Museum, should spend four months in Assam during 1895-96 with the object of investigating the several animal and insect pests injurious to agriculture; but this arrangement fell through, owing to Mr. Cotes' retirement. It was subsequently decided that Dr. George Watt, Reporter on Economic Products, should pay a visit to the province to arrange for collections illustrative of the tea industry for the Imperial Institute, to make enquiries as to the value of the *Adhatoda vasica* plant as an insecticide on tea gardens, and to study the subject of tea blights generally. Dr. Watt teached my camp in the Sibságar district on the 18th March, and is still pursuing his investigations. The result of his enquiries will find mention in the next annual report of this Department. The prize competition for the best essay on tea-blights, which was referred to in paragraph 45 of the last report, has been postponed until all existing information has been brought together and published in a collected form.

State patronage of Muhammadans.

43. There was no Muhammadan in superior service under this Department during the year.

Rainfall registration.

44. The registration of the rainfall was carried on as usual, and weekly and monthly returns were published in the Gazette. Printed copies of both were forwarded to the Meteorological Reporter to the Government of India. The total number of rainfall stations at the close of the year was 101 (46 under Government management and 55 maintained by tea-planters), against 97 in the previous year. The four stations newly added are Jatinga Valley, in Cachar, Orangajuli in Darrang, Mauphlang in the Khási and Jaintia Hills, and Sairang in the North Lushai Hills. The rain-gauge at Kapili, in the district of Nowgong, was transferred to Lanka, in the same district.

Appendix K gives details as to the number of stations in each district, and the instruments they are provided with. One copy of the *Assam Gazette* is sent gratis to each non-official who furnishes rainfall statistics.

45. The following statement shows the number of rain-gauges that were inspected by the Deputy Commissioners, Subdivisional Officers, Civil Surgeons, and District Superintendents of Police, during the year:

Inspection of rain-gauges.

District.	Net number of stations.	Number of inspections: By Deputy commissioners and Subdivisional officers.	By Civil Surgeons.	By District Superintendents of Police.	Total.	Number of gauges not visited more than once.	Number of different gauges inspected.	Number of gauges not inspected.
Cachar	11	1	4	...	5	1	4	7
Sylhet	12	3	...	...	3	...	3	9
Goálpára	6	2	...	1	3	...	3	3
Kámrúp	16	1	...	...	1	...	1	15
Darrang	13	...	...	...	...	...	...	13
Nowgong	7	1	5	...	6	1	5	2
Sibságar	11	2	2	1	5	...	5	6
Lakhimpur	12	2	...	1	3	...	3	9
Nága Hills	5	1	...	...	1	...	1	4
Khási and Jaintia Hills	4	4	2	...	6	4	2	2
Gáro Hills	1	...	...	...	...	...	...	1
Manipur	1	...	...	...	...	...	...	1
North Lushai Hills	...	...	...	...	...	...	...	...
Total	101	17	13	3	33	4	27	74

A circular was issued in September last, pointing out the small number of inspections made during the year 1893-94, and requesting that steps might be taken to ensure the regular inspection of rain-gauges. There has been a slight improvement during the year under review; but the subject still fails to receive sufficient attention, especially in the districts of Sylhet, Kámrúp, Darrang, Lakhimpur, and the Nága Hills.

46. In accordance with the circular of the Government of India, Revenue and Agricultural Department, No. 30—15, dated the 16th July 1892, a sum of Rs. 500 is annually included in the budget of this department for expenditure on the purchase of specimens, the institution of enquiries, and other similar objects connected with the Imperial Institute. Fifty-one pieces of dyed cotton, *muga* and *erí* cloths, which had been purchased last year (*vide* paragraph 50 of the Report for 1893-94) at a cost of Rs. 365-12, were sent during the year to the Reporter on Economic Products to the Government of India, and a collection of all the dye stuffs used in the tinctorial industries was taken in hand. A greater portion of this collection has already been despatched. Twenty pounds of *Rubia khasiana* (a local variety of madder) were collected and sent to the Reporter on Economic Products, with a view to its being examined chemically, and to its value as a dye being practically tested. Some seeds and herbarium specimens of *Euryale ferox* (a water plant), which grows on the Latak lake in Manipur, and some other food products of the lake, were sent to the same officer for transmission to the Imperial Institute authorities. A few commercial products are at the present time being collected and sent to the Reporter on Economic Products for index collections, to be prepared for the Indian Museum, Calcutta, and the Imperial Institute, London.

Collection of economic products.

At the instance of the Government of India, specimens of some of the Assam brass and copper wares mentioned in my note drawn up on the subject last year, were sent to the Assistant Curator, Economic and Art Section, Indian Museum, Calcutta, at a cost of Rs. 152-15.

47. The following statement gives details as to the expenditure incurred by this Department during the year, and compares the figures with those of the previous year:

Expenditure.

Year.	Superintendence, &c.	Settlement offices.	Survey schools.	Kanungo establishment.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1893-94 ...	*39,060 9 10	49,821 5 10	1,895 13 6	1,11,269 0 0	2,02,046 13 2
1894-95 ...	43,202 4 1*	59,188 13 0†	2,223 12 2	1,18,514 6 8‡	2,23,129 3 11

This includes—

	Rs. a. p.
(*a*) Head office charges	31,259 10 8
(*b*) Charges for the office of the Superintendent of Land Records	10,778 0 10
(*c*) Travelling allowance of Temporary Sub-Deputy Collectors	350 10 0
(*d*) Experimental cultivation	20 10 0
(*e*) Instruments, &c., for conducting crop experiments	129 11 6
(*f*) Veterinary charges	250 9 3
(*g*) Rain-gauges	169 3 4
(*h*) Economic collections (inclusive of a refund of Rs. 5)	243 12 6
Total	43,202 4 1

† This includes—

	Rs. a. p.
(*a*) Cost of Jaintia Settlement Office ...	34,966 7 2
(*b*) ,, Cachar ,, ,, ...	24,222 5 10
Total	59,188 13 0

‡ This includes—

	Rs. a. p.
(*a*) Registrar kanungos	7,818 14 6
(*b*) Assistant ,, ...	1,708 8 0
(*c*) Supervisor ,, ...	15,554 1 10
(*d*) District mandals	81,903 14 0
(*e*) Chainmen and peons	1,139 9 4
(*f*) Temporary establishment	1,027 9 6
(*g*) Travelling allowance	678 9 9
(*h*) Petty construction and repairs	697 5 3
(*i*) Cost of instruments and repairs	1,045 10 0
(*j*) Map charges	351 9 0
(*k*) Rewards	4,175 1 4
(*l*) Office expenses and miscellaneous	1,513 10 2
Total	1,18,514 6 8

The increase under the head "Superintendence" is due to (1) increased rate of exchange compensation allowance; (2) progressive increase in the pay of the Superintendent of Land Records; (3) larger amount of travelling allowance drawn by the Superintendent of Land Records, he having been on tour for 311 days against 239 days in the previous year; (4) expenditure incurred in the purchase of certain instruments, &c., for the Theodolite Class at Tezpur, referred to in paragraph 3 above; (5) increase in the postal charges owing to parcels, packets, &c., now being sent prepaid (*cf.* correspondence ending with Secretary to the Chief Commissioner's No. 1701Misc.—7296G., dated the 31st October 1894); (6) travelling allowance of Temporary Sub-Deputy Collectors, which is a new item of the expenditure.

Of the sum of Rs. 505 shown under "Economic collections" in the Report for 1893-94 as expended during that year, Rs. 107-12 were subsequently refunded into the treasury.

The increase under the head "Settlement offices" is due to the Jaintia and Cachar Settlement Offices having remained open throughout the year. The increase under "Survey schools" has been explained in paragraph 6 above. The increase under the head "Kanungo establishment" is mainly due to the promotion of supervisor kanungos and mandals to fill vacancies in the higher grades, and to a larger sum having been granted as rewards to the supervisor kanungos and mandals employed on extension survey operations.

E. A. GAIT,

Director, Department of Land Records and Agriculture, Assam.

Shillong,

The 28th May 1895.

APPENDICES.

APPENDIX A.

Diary Statement of Sub-Deputy Collectors for the year 1894-95.

Name of Sub-Deputy Collector.	District	Subdivision.	Number of days in charge.	Number of days on tour.										Number of days without work.								Remarks.
				In cadastral mauzas.					In non-cadastral mauzas.													
				Running check lines.	Testing crops.	Examining mauzahs' papers.	Enquiring into cases.	Miscellaneous work, inspecting thanas etc stations, &c.	Testing measurements.	Examining mauzahs' papers.	Enquiring into cases.	Miscellaneous work.	Total.	Number of days at office work.	Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half pay.	Leave without pay.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Babu Purna Chandra Mitra	Sylhet	Karimganj	365	24	15	13	32	37	9	..	18	11	179	155	17	14	..	..	..	..	31	
,, Tripura Charan Mukherji (Temporary Sub-Deputy Collector).	Goalpára	Dhubri	48	9	...	..	..	1	3	1	13	6	33	5	9	1	..	..	..	..	10	
,,	,, ...	,, ...	98	..	..	..	..	..	..	..	5	..	5	86	2	5	..	..	..	..	7	
Jajneswar Dás Gupta	Darrang	Mangaldai	365	23	2	11	6	52	..	2	..	39	142	81	8	34	..	..	..	..	42	
,, Parvati Sankar Kar	Kámrúp	Barpeta	156	17	..	1	3	3	..	..	..	..	23	120	..	15	10	..	..	..	25	
,, Rajani Kanta Bardalai	,, ...	,, ...	154	39	1	25	2	25	15	3	2	4	107	47	..	..	..	..	..	..	..	
	Lakhimpur	North Lakhimpur ..	202	5	..	4	11	7	3	..	5	15	50	106	3	15	8	20	..	..	46	
,, Bhola Nath Dás	Kámrúp	Gauhati	365	49	1	44	4	43	2	3	3	3	151	189	..	24	1	..	..	..	25	
,, Ratnadhar Barua	Darrang	Mangaldai	23	..	..	..	..	..	..	..	..	9	9	11	1	2	..	..	..	..	3	
,, Krishna Chandra Chaudhuri ..	,, ...	Tezpur	365	33	..	8	8	110	..	..	..	11	170	136	..	41	12	6	..	..	59	
,, Radha Mohan Dás	Nowgong	Nowgong	304	40	11	31	21	42	..	..	..	14	159	119	15	12	..	6	..	..	33	
Maulvi Nasir Uddin Ahmad	Sibsagar	Golaghát	185	5	..	5	4	22	..	..	..	26	52	129	3	1	..	..	..	..	4	
Babu Radha Kanta Handique	,, ...	Jorhát	222	22	4	4	9	24	..	..	..	..	63	137	7	12	3	..	..	..	22	
,, Phanidhar Chaliha	,, ...	Sadr	365	74	10	23	37	32	7	1	1	..	185	154	..	26	..	..	..	..	26	
Maulvi Nasirat Ulla	Lakhimpur	Dibrugarh	305	59	6	11	42	17	30	6	10	14	175	150	..	40	..	..	..	..	40	
Maulvi Muhammad Sadir	,, ...	North Lakhimpur ..	163	30	7	0	10	9	7	3	5	5	80	77	2	1	3	..	..	..	6	

APPENDIX B.

Diary Statement of Supervisor Kanungos for the year 1894-95.

Name of Supervisor Kanungo.	Name of circle.	District.	Subdivision.	Number of days in charge.	Number of days on tour.										Number of days at office work.	Number of days without work.						Remarks.
					In cadastral mauzas.					In non-cadastral mauzas.												
					Running check lines.	Testing crops.	Examining mauzahs' papers.	Examining into cases.	Miscellaneous work, inspecting thanas &c.	Testing measurements.	Examining mauzahs' papers.	Enquiring into cases.	Miscellaneous work.	Total.		Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half pay.	Leave without pay.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Bhagwath Dass ..	Raha	Kamrup	Barpeta	365	150	7	8	12	41	2	1	1	..	222	112	8	..	13	..	..	21	
Basir Ali Biswas ..	Barpeta	..	..	334*	56	9	3	18	37*	..	1	1	..	105	151	5	1	11	..	..	..	18	* Exclusive of 31 days spent at Tezpur, in learning the use of the theodolite.
Sahib Uddin ..	Baijali	..	..	304	91	23	8	2	33	..	..	1	..	159	122	10	6	..	17	..	..	33	
Sita Ram (Officiating) ..	..	..	..	61	15	..	..	8	..	..	..	..	..	23	36	..	..	..	..	..	..	..	
Nit. nanda ..	Betta	..	Gauhati	365	35	49	71	6	23	..	..	..	..	184	130	18	..	9	..	..	..	27	
Manson Ram ..	Palasbari	..	..	122	24	..	21	..	5	..	..	..	..	60	39	14	..	9	..	..	..	23	
Jagat Ram (Officiating) ..	..	..	..	188	23	11	45	..	24	..	..	..	..	108	57	14	6	5	..	..	..	25	
Kan Nath ..	..	..	..	35	20	..	2	..	..	..	..	..	..	31	69	4	..	1	..	..	..	5	
Megh Ram ..	Boko	..	..	123	30	18	11	..	6	6	6	1	1	79	15	4	32	..	..	..	..	36	
Thana Ram (Officiating) ..	..	..	..	104	..	..	37	2	..	3	10	..	10	62	34	3	..	5	..	..	..	8	
Rangdes Sarma ..	..	..	..	138	36	30	8	4	30	2	..	5	4	119	10	9	..	..	..	..	..	9	
Bati Ram (Officiating) ..	Patidarr.	..	..	156	19	22	6	28	27	..	..	..	..	92	48	16	..	..	..	..	..	16	
Mohin Chandra Bara ..	..	..	..	209	22	..	10	24	42	..	..	..	..	98	101	10	..	3	..	..	..	13	
Jugal Ram Das (Officiating) ..	Hâtu	..	..	109	14	6	..	12	11	..	..	..	..	43	46	3	..	11	..	..	..	14	
Jai Ram Das ..	..	..	..	236	49	26	30	22	24	..	..	..	..	151	103	8	3	..	..	..	..	11	
Laghann Ram Das ..	Barkhetri	..	..	218	35	1	23	27	13	..	..	..	..	80	103	6	2	..	30	..	..	38	
Laghann Ram Das ..	Bijni tahsil	..	Goalpara	146	48	6	20	..	37	..	..	..	..	111	33	0	..	..	..	..	..	6	Employed in Bijni extension survey.
Mohan Chandra Bara ..	Barkhetri	..	Kamrup	147	56	2	6	8	4	..	..	..	..	76	67	2	..	..	..	..	..	4	
Tira Ram Patta ..	Barigog	..	..	305	74	28	10	4	36	..	..	..	..	152	110	20	7	31	12	..	..	57	
Kan Nath ..	Pândori	..	..	133	2	..	..	5	12	..	..	..	..	19	96	4	..	1	..	..	7	7	

Name of Supervisor Kanungo.	Name of circle.	District.	Subdivision.	Number of days on tour.											Number of days at office work.	Number of days without work.						Remarks.
				Number of days in charge.	In cadastral mauzas.					In non-cadastral mauzas.						Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half pay.	Leave without pay.	
					Running check lines.	Testing cops.	Examining mandais' papers.	Enquiring into cases.	Miscellaneous work, inspecting mauzas, measuring, &c.	Testing measurements.	Examining mandais' papers.	Enquiring into cases.	Miscellaneous work.	Total.							Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Nar Nath (Officiating)	Pánduri ..	Kamrúp ..	Gauhati ..	53	..	..	..	..	..	..	..	..	..	..	48	5	..	..	..	..	..	5	
Mantan Rám	.. ..	.. ..	.. ..	182	34	13	..	4	43	..	..	..	..	..	94	35	33	9	11	..	..	..	53	
Rangdev Sarma	Nalbári ..	.. ..	.. ..	183	6	13	13	13	33	..	..	..	..	..	68	90	16	..	3	..	..	..	19	
Sánti Rám (Officiating)	.. ..	.. ..	.. ..	102	1	..	36	8	2	..	..	..	..	..	47	47	7	1	..	..	..	..	8	
Mághi Rám Dás	.. ..	.. ..	.. ..	80	8	20	15	10	8	..	..	..	..	..	61	6	5	..	8	..	..	..	13	
Dhir Sing Deka	Támbulpur ..	.. ..	.. ..	331*	131	38	35	3	11*	..	..	..	..	..	107*	88	10	2	6	18	..	..	36	* Exclusive of 24 days spent in Tezpur, leaving the use of the theodolite.
Mádhab Rám Gagai	Barama ..	.. ..	.. ..	216	56	44	20	25	55	..	..	..	..	..	180	110	21	11	4	..	..	..	26	
Pea Rám (Officiating)	.. ..	.. ..	.. ..	49	..	..	..	..	..	..	..	..	..	..	49	..	..	..	..	..	..	..	..	
Kalámani Dás	Mangaldai ..	Darrang ..	Mangaldai ..	317	65	15	10	24	63†	2	..	1	3	182	105	8	2	10	10	..	..	30	† Exclusive of 48 days spent in Tezpur, leaving the use of the theodolite.
Jajna Rám Saharia	Kálaigaon ..	.. ..	.. ..	365	54	12	14	4	64	..	..	..	..	148	162	36	3	2	14	..	..	55	
Chandra Kánta Sarkár	Sipájhar ..	.. ..	.. ..	306	57	6	14	22	46	..	..	..	..	145	152	12	..	17	..	..	..	29	
Mani Rám Dás (Officiating) ..	.. ..	.. ..	.. ..	31	..	..	..	6	3	..	..	..	..	9	22	..	..	..	..	..	..	..	
Saru Rám Dás (..) ..	.. ..	.. ..	.. ..	28	2	..	..	1	6	..	..	..	..	9	19	..	..	..	..	..	..	..	
Rámmal Dás	Bengbári ..	.. ..	.. ..	365	89	8	7	2	92	..	..	..	..	198	184	5	4	4	..	..	..	13	
Kush Rám Dás (Officiating) ..	Western ..	.. ..	Tezpur ..	22	6	..	..	..	6	..	..	..	..	18	4	..	..	..	..	..	..	..	
Durgá Rám Datta	.. ..	.. ..	.. ..	343	51	30	..	32	49	..	..	..	..	162	221	..	25	6	..	30‡	..	60	
Gangá Rám Dás	Eastern ..	.. ..	.. ..	365	20	13	..	41	138‡	..	..	..	..	212	126	..	23	4	..	..	..	27	
Rahi Charan Dás	Town ..	Nowgong ..	Nowgong ..	265	59	51	7	24	83	..	..	..	..	224	115	..	14	3	9	..	..	26	
Rámrath Datta	Silghát ..	.. ..	.. ..	317‡	66	16	13	16	103	1	1	2	4	221	88	..	1	6	1	..	..	8	‡ Exclusive of 48 days spent in Tezpur, leaving the use of the theodolite.
Jai Rám Dás	Doboka ..	.. ..	.. ..	325	107	15	25	13	71	12	..	7	..	242	123	..	..	4	..	..	..	4	
Sib Nath Sarma	Raha ..	.. ..	.. ..	305	92	8	10	11	114	3	1	..	..	239	96	..	..	..	30	..	..	30	

Gobinda Ram Datta	..	..	Dhing	..	..	..	..	..	..	135	42	9	2	12	90	..	..	..	..	..	325	10	1	1	..	..	..	..	2			
Bhakat Ram Datta	..	..	,,	..	,,	..	,,	..	..	133	..	..	..	2	3	..	..	..	..	..	12	126	..	..	15	..	..	..	15			
Madan Chandra Sarma	..	..	,,	..	,,	..	,,	..	..	92	31	..	..	6	13	..	..	..	..	..	55	21	7	1	12	..	..	..	20			
Gobinda Ram Datta	..	..	Gerua	..	,,	..	,,	..	..	1705	34	..	..	4	55	..	..	..	..	..	93	77	8	..	..	..	..	..	8	§ Exclusive of 52 days spent in Tezpur, learning the use of the theodolite.		
Bhakat Ram Datta	..	..	,,	..	,,	..	,,	..	..	135	33	6	15	..	64	..	..	..	..	..	124	6	6	..	..	..	..	..	6			
Lakshmi Ram Das	..	..	Ghagua	..	,,	..	,,	..	..	368	33	22	24	8	136	..	..	..	..	..	212	76	6	1	..	..	..	..	7			
Fita Ram Gagai	..	..	Mayang	..	,,	..	,,	..	..	365	53	26	34	1	9	4	6	..	..	..	314	126	..	20	4	7	..	..	31			
Manu Ram Talukdar	..	..	Northern	..	Sibsagar	..	Golaghat	..	..	365	78	..	..	2	102	..	..	..	..	..	182	183	..	..	..	..	..	..	..			
Paul Ram Mahanta	..	..	Southern	..	,,	..	,,	..	..	312*	93	17	95	9	32	..	..	..	..	..	225	63	12	7	8	..	..	..	27			
Mahi Ram Das (Junior)	..	..	Eastern	..	,,	..	Jorhat	..	..	1098	8	..	..	10	438	..	..	..	..	..	70	98	11	6	10	..	..	..	27	¶ Exclusive of 50 days spent in Tezpur, learning the use of the theodolite.		
Ditto	..	..	,,	..	,,	..	,,	..	..	113	..	..	..	..	..	..	..	..	..	..	113	..	..	..	..	..	..	..	..	Deputed to theodolite survey and demarcations of special tenures.		
Nárâyan Sarma (Officiating)	..	..	,,	..	,,	..	,,	..	..	10	..	..	..	..	..	..	..	..	..	..	..	10	..	..	..	..	..	..	..			
Bhola Ram Datta	..	..	,,	..	,,	..	,,	..	..	113	31	..	..	8	57	..	..	..	..	..	76	20	15	..	2	..	..	..	17			
Mahi Ram Das (Senior)	..	..	North-western	..	,,	..	,,	..	..	365	63	13	15	33	42	1	1	1	..	..	176	162	4	14	1	6	..	..	25			
Kâli Ram Das	..	..	South-western	..	,,	..	,,	..	..	348	101	21	10	15	37	1	..	..	..	..	176	109	..	15	21	..	..	13*	58			
Nárâyan Sarma (Officiating)	..	..	,,	..	,,	..	,,	..	..	20	..	..	..	..	..	..	..	..	..	..	..	17	..	3	..	..	..	..	20			
Mená Ram Das	..	..	Majuli	..	,,	..	,,	..	..	365	8	10	8	..	52	..	..	..	..	..	106	14	8	15	2	13	..	..	50			
Sri Ram Bara	..	..	Eastern	..	,,	..	Sadr	..	..	3168¶	33	11	42	1	24	..	..	..	..	..	1,065	135	18	..	2	..	..	..	5	¶ Exclusive of 40 days spent in Tezpur, learning the use of the theodolite.		
Meher Uddin Para	..	..	Central	..	,,	..	,,	..	..	223	4	13	2	6	34	..	..	..	..	..	63	140	1	10	..	..	..	..	19			
Gobinda Nath Ray	..	..	,,	..	,,	..	,,	..	..	125	12	14	20	3	32	..	..	..	..	..	77	42	3	..	6	..	..	..	8			
Lalit Ram Chaudhuri	..	..	Western	..	,,	..	,,	..	..	365	29	27	30	17	57	..	..	..	..	..	152	194	5	5	6	..	..	..	16			
Maheswar Das	..	..	Dibrugarh	..	Lakhimpur	..	Dibrugarh	..	..	310	51	30	8	32	64	..	..	..	..	..	150	139	1	8	1	..	..	..	12			
Chaneswar Sarma (Officiating)	..	..	,,	..	,,	..	,,	..	..	55	..	..	3	..	..	..	..	..	..	..	3	47	..	5	..	..	..	..	5			
Lakshmi Kanta Das	..	..	Chabua	..	,,	..	,,	..	..	316**	40	13	4	15	52	..	..	..	..	..	134	136	5	18	..	..	..	..	26	** Exclusive of 49 days spent in Tezpur, learning the use of the theodolite.		
Jagannath Deka	..	..	North Lakhimpur	..	,,	..	North Lakhimpur	..	..	294††	112	4	..	47	27	..	..	..	..	..	192	96	10	..	..	..	..	..	10	†† Exclusive of 30 days spent in Tezpur, learning the use of the theodolite.		
Kamala Kanta (Officiating)	..	..	,,	..	,,	..	,,	..	..	20	10	..	..	..	4	..	..	..	..	..	14	6	..	..	..	..	..	..	..			

APPENDIX C.

Work Statement of District and Subdivisional Officers for the year 1894-95.

Name of officer.	District.	Subdivision.	Area cadastrally surveyed.													Area not cadastrally surveyed.								Area found wrongly classified.			Remarks.
			Number of supervisor kanungos whose work was inspected.	Number of villages tested.	Number of mandals.			Testing by check lines.						Testing without check lines.		Number of villages.	Number of mandals.			Total area as shown by mauzadars.	Total area as shown by measurement.	Percentage of error.	Area of concealed cultivation discovered.	*Basti* shown as			
					Total number.	Whose papers examined.	Whose field-work tested.	Number of lines.	Number of kutcheries.	Number of effects.	Length of lines, in miles.	Area of fluctuating cultivation in jurisdiction, in acres.	Number of linear miles per square mile of fluctuating cultivation.	Number of fields tested.	Area, including jungle, in acres.		Total number.	Whose papers examined.	Whose field-work tested.					*Basti*.	*Taringati*.	*Rupit* shown as *Jarbigati*.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
																				Acres.	Acres.						
Captain P. R. T. Gurdon ..	Goalpara ..	Dhubri ..	1	11*	15	..	11	13	162	401	8715	927	5·62	..	..	..	2	..	..	..	..	..	..	..	..	41	* Represents number of sheets in nine villages.
Babu Madhab Chandra Bardaloi, Subdivisional Officer.	Kamrup ..	Barpeta ..	..	12	55	11	15	24	274	305	10·36	31,371	0·21	12	30	3	16	2	2	265	254	4·33	..	..	..	..	
R. H. McCabe, Esq., Deputy Commissioner.	,, ..	Sadr ..	..	..	204	6	..	..	..	..	..	..	..	..	..	..	27	2	..	..	..	..	..	..	..	..	
D. H. Lees, Esq., Subdivisional Officer.	Darrang ..	Mangaldai ..	..	..	83	35	..	..	..	..	..	8,407	..	..	..	..	4	..	..	..	..	..	..	..	..	..	
H. E. Ransom, Esq., Subdivisional Officer.	,, ..	,, ..	..	..																							
J. C. Arbuthnott, Esq., Deputy Commissioner.	,, ..	Tezpur ..	..	..	23	..	..	..	..	..	..	6,641	..	..	..	..	30	..	..	..	..	..	..	..	..	..	
H. E. Ransom, Esq., Officiating Deputy Commissioner.	,, ..	,, ..																									
E. W. Nicholl, Esq., Officiating Deputy Commissioner.	,, ..	,, ..																									
F. Mackillaine, Esq. ..	Nowgong ..	Nowgong ..	..	1	151	..	1	1	12	15	0·66	35,744	0·01	..	..	..	15	..	..	..	..	..	..	..	..	..	
L. J. Kershaw, Esq., Assistant Commissioner.	Sibsagar ..	Golaghat ..	2	..	47	12	..	..	..	..	..	5,055	..	..	..	..	3	..	1	..	..	..	..	..	..	..	† In cadastral area.
Lieut. H. W. G. Cole, Assistant Commissioner.	,, ..	Jorhat ..	5†	4	78	66	2	7	67	63	3·50	5,206	0·74	..	..	..	6	2	..	..	..	..	..	..	..	..	‡ In extension.
			3‡	..			1	6	101	61	3·15						..	..									
C. W. E. Pitter, Esq., Deputy Commissioner.	,, ..	Sadr ..	2	4	68	11	3	4	33	35	1·43	6,107	0·11	..	..	1	3	..	1	4·33	4·66	7·62	..	..	..	..	
R. S. Grenabickle, Esq., C.S., Deputy Commissioner.	Lakhimpur ..	Dibrugarh ..	..	..	27	..	..	..	..	..	..	1,098	..	..	..	..	48	6	..	..	..	..	..	..	..	..	
F. J. Prentice, Esq., Subdivisional Officer.	,, ..	North Lakhimpur.	1	4	19	10	4	11	62	82	2·97	2,278	0·58	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	..	..	11	39	772	160	37	66	781	962	29·41	130,888	0·13	12	30	4	154	12	4	269·33	258·66	3·96	..	..	..	..	

APPENDIX D.

Work Statement of Sub-Deputy Collectors for the year 1894-95.

Name of Sub-Deputy Collector.	District.	Subdivision.	Area cadastrally surveyed.											Area not cadastrally surveyed.								Area found wrongly classified.			Remarks.
			Number of villages tested.	Number of mandals.			Testing by check-lines.					Testing without check lines.		Number of villages.	Number of mandals.			Total area as shown by mandalar.	Total area as shown by re-measurement.	Percentage of error.	Area of concealed cultivation discovered.	Area shown as Rayoti.	Area shown as Jarogati.	Rayoti shown as Jarogati.	
				Total number.	Why re-measured.	Whose field work tested.	Number of lines.	Number of chains.	Number of offsets.	Length of lines, in miles.	Area of fluctuating cultivation, in acres.	Number of fields tested.	Area, including jungle, in acres.		Total number.	Whose examined.	Whose field work tested.								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
																			Acres.	Acres.		Acres.		Acres.	Acres.	
Babu Purna Chandra Mitra ...	Sylhet ...	Karimganj ...	51	4	4	4	38	301	308	17·38	..	...	123	·9	...	...	...	...	...	...	...	...	...	...	...	
,, Tripura Charan Mukherji (Temporary Sub-Deputy Collector)	Goalpára ...	Dhubri ...	12	15	12	12	22	262	602	12·63	027	8·71	137	..	2	1	2	27	82	6·00	...	...	...	1	
,, Rajani Kánta Bardaloi ...	Kámrúp ...	Barpeta ...	31	55	30	24	(a)30	298	847	21·00	31·171	1·15	162	1,202	...	...	...	...	...	...	...	...	...	...	
			16		...	12	(b)15	251	396	11·01			...	...	14	16	6	7	3'10·81	400·07	7·09	28·03	...	...	
			2		...	2	(c)2	31	73	1·06			...	...	...	...	...	...	...	...	...	...	...	...	
,, Parvati Sankar Kar ...	,, ...	,, ...	20	2	1	20	(a)33	322	456	13·80			...	...	...	...	...	...	...	...	...	...	...	...	
,, Bholi Nath Dás ...	,, ...	Gauhati ...	80	204	102	72	(a)56	1,112	1,100	21·53	35·254	0·78	40	16·10	4	37	14	7	...	...	...	...	...	...	...	
							(b)18	327	767	12·05																
							(c)12	34	31	1·73																
,, Ratnadhar Barua	Darrang ...	Mangaldai ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
,, Jogeschar Das Gupta ...	,, ...	,, ...	34	83	83	23	61	556	995	23·86	8,107	3·58	...	...	4	4	2	...	...	...	...	...	...	...	...	
,, Krishna Chandra Chaudhuri ...	,, ...	Tezpur ...	40	25	25	20	72	473	601	31·07	6,041	3·03	...	...	30	32	...	...	...	...	...	...	...	...	...	
,, Rádhá Mohan Dás ...	Nowgong ...	Nowgong ...	198	151	151	120	(a)41	419	550	11·00	35,744	0·62	248	170	1	15	5	3	...	...	...	...	...	...	...	
							(b)48	33	27	1·51																
							(c)5	51	40	1·7					...	3	3								
Munshi Dabir Uddin Ahmad ...	Sibságar ...	Golághát ...	8	47	47	6	...	...	...	...			...	...	...	...	...	...	...	...	...	...	...	...	...	
							(a)3	114	46	3·40	(a)35,055	·118	...	...	...	...	...	...	...	...	...	...	...	...	...	
							(b)16	...	3	5·06			...	...	...	...	...	...	...	...	...	...	...	...	...	
Babu Radha Kanta Handqui ...	,, ...	Jorhat ...	5	5	30	3	(a)14	135	201	5·28	(a)35,806	·105	...	...	...	6	2									
			15	78	...	15	(b)24	288	562	9·38			...	...	...	...	...	...	...	...	...	...	...	...	...	
			6		...	3	(c)10	20	56	3·03			...	...	...	...	...	...	...	...	...	...	...	...	...	
,, Phanidhar Chaliha ...	,, ...	Sadr ...	121	68	68	64	(a)41	540	474	17·52			...	...	...	...	...	...	...	...	...	...	...	...	...	
							(b)16	65	80	1·21	6,137	2·05	770	1,656	2	3	3	2	152	162	7·21	2	...	2	1
							(c)84	351	409	25·89																
Munshi Mashiat Ulla ...	Lakhimpur ...	Dibrugarh ...	52	27	27	18	(a)149	642	1,648	33·05	1,208	7·53	142	112·50	7	48	16	6	165·17	161·41	8·49	1·62	...	3·84	...
							(b)16	29	66	1·54																
Babu Rajani Kánta Bardaloi ...	,, ...	N. Lakhimpur ...	7	19	16	6	7	40	54	1·45	2,278	3·38	40	8,455	14	14	14	...	...	...	...	...	...	...	...	
Maulvi Muhammad Sádr ...	,, ...	,, ...	54			10	40	320	384	12·25			05	349	15	14	14	6	320	533	1·48	8	...	...	...	
Total	...	...	795	776	707	445	913	7,440	10,522	329·43	1,31,188	1·51	1,757	8,493·05	47	1·2	112	37	1,314·99	1,324·23	4·51	47·65	...	5·84	2	

(a) Independent check lines.
(b) Check lines run over the lines of subordinate officers.
(c) Check lines run in extension survey.
(d) With superior officers in extension survey.
(e) With superior officers in the old area.
(f) Lines run in surveying waste land grants, &c.
(g) Inclusive of the areas of fluctuating cultivation of Abatguri, i
(h) Exclusive of ditto ditto d tt.o

APPENDIX E.

Work Statement of Supervisor Kanungos for the year 1894-95.

Name of Supervisor Kanungo.	Circle.	District.	Subdivision.	Area cadastrally surveyed.											Testing without check lines.		Remarks.
				Number of villages tested.	Number of mandals.			Testing by check lines.									
					Total number.	Whose papers examined.	Whose field work tested.	Number of lines.	Number of fathoms.	Number of offsets.	Length of lines, in miles.	Area of fluctuating cultivation in jurisdiction, in acres.	Number of jungle mills employed on inspection of fluctuating cultivation.	Number of fields tested.	Area, including jungle, in acres.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Sáhab Uddin Ahmad ..	Bajali ..	Kámrúp ..	Barpeta	(a)39	20	20	21	54	4·5	908	(a)31·44			177	431	
				(b) 7	7	7	7	143	396	435	(b)40·94	7,718	7·10	217	885	
Sita Rám Dás (Officiating) ..	.. ..	.. ..	..	17	18	18	13	33	317	576	13·26			100	265	
Basir Ali Biswás	Barpeta ..	.. ..	..	(a)82	19	19	18	118	3,147	1,357	(a)49·31			207	576	
				(b)16	13	13	13	70	627	714	(b)22·83	12,804	9·28	25	54	
				(c) 4	..	..	..	3	69	87	(c) 1·63			..	..	
Bhagwath Deka	Raha	.. ..	..	(a)70	16	16	16	92	788	1,303	(a)36·88			1,080	2,678	
				(b)17	16	16	16	240	1,233	1,935	(b)51·89	10,849	5·23	1,643	..	
				(c) ..	..	..	2	2	24	40	(c) 1·03			..	..	
Nityánanda Das	Beltala ..	.. ..	Gauhati	(a)61	11	11	10	20	129	232	43 7·70			1,055	909	
				(b) 7		2	2	12	132	229	(b) 5·22	1,343	0·15	129	76	
Mantan Rám Dás	Palásbári ..	.. ..	..	(a)22	31	21	18	25	274	247	(a)12·26			215	212	
				(b) 1	..	..	..	1	..	..	(b) 1·23			..	..	
Jagat Rám	.. ..	.. ..	..	18	..	21	11	75	550	630	24·01	7,602	6·22	1,483	400	
				(a)20	..	6	5	12	132	196	(a) 7·83			92	37	
Ran Nath	.. ..	.. ..	..	(c) 1	..	..	1	1	14	6	(c) 0·85			..	..	
				(b) 3	..	..	3	39	63	115	(b)13·01			..	..	

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33	23	..	22	181	567	1,205	35·72				1,237	83		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	..	..	24	..	..	..	..	..				..	..		
[illegible]rma ..	..	..	..	..	..	..	..	(a) 13	..	24	11	11	169	321	(a) 9·10	6,505	6·69	1,562	1,023			
								(b) 7	..	..	6	9	102	83	(c) 5·36			538	187			
								(c) 12	..	..	12	17	319	416	(b) 23·16			467	841			
[illegible] Par Chandra Bala ..	..	Pulabarua	..	..	..	..	..	(a) 14*	..	10	7	2	8	2	(a) 1·50			1,368	650			
								(b) 2	21	2	7	37	238	300	(b) 6·05	441	24·00	175	110			
[illegible] [illegible]	..	..	..	..	..	..	..	(a) 18	..	19	16	20	236	215	(a) 6·05			2,225	1,552			
								(b) 21	..	2	2	..	..	..	(b) ..			323	338			
[illegible] [illegible] Ch[illegible]	..	Ha[illegible]	..	..	..	..	..	30	21	..	13	31	568	529	17·38	4,281	6·29	650	663			
[illegible]	..	..	..	..	..	..	..	147	..	21	21	20	50	783	883	24·74			1,835	1,383			
[illegible] [illegible] Bala	..	Barkhetri ..	..	..	..	..	..	85	..	16	16	61	918	1,570	31·50			157	93			
[illegible] [illegible] Dutt	..	Bijni tahsil	..	Goalpara	..	Dhubri	..	276	15	15	15	68	978	2,601	47·85	987	33·01	704	1,001			
Bipin Chandra Bara	..	Barkhetri	..	Kamrup	..	Gauhati	..	(a) 83	11	16	16	110	1,238	1,751	(a) 41·66	8,827	5·33	1,312	1,005			
								(c) 13		..	10	20	232	289	(c) 7·53			..	..			
[illegible] Ram Datta ..	..	Bargon ..	..	..	..	..	..	(a) 46	14	14	12	82	706	1,409	(a) 38·55	1,014	24·33	4,106	3,413			
								(c) 4		..	2	7	97	83	(c) 3·34			..	..			
[illegible] Nath ..	..	Pandari ..	..	..	..	..	..	37	12	12	12	17	180	416	7·30	802	13·12	1,002	452			
[illegible]ndan Pain ..	..	.. .. ..	..	..	..	..	..	48		..	12	23	234	286	8·95			192	167			
[illegible] [illegible] Sarma ..	..	Naihāti ..	..	..	..	..	..	16	19	19	14	8	77	131	3·04		21·19	2,044	2,339			
[illegible] [illegible] Das ..	..	.. .. ..	..	..	..	..	..	23		19	19	40	327	705	12·40	368		1,087	2,247			
[illegible] Ram Das ..	..	.. .. ..	..	..	..	..	..	1		19	1	1	40	30	0·61			..	..			
[illegible] [illegible] Sen ..	..	Tambulpur	..	..	..	..	..	(a) 42	18	17	16	138	713	1,378	(a) 9·77	2,835	13·99	1,927	2,209			
								(b) 11		1	1	47	268	484	(b) 17·80			224	268			
Lab Ram Gazi ..	..	Barama ..	..	..	..	..	..	92	18	18	18	73	567	737	24·27	1,136	13·98	3,913	4,619			
[illegible]ndra Das ..	..	Mangaldai ..	..	Darrang	..	Mangaldai	..	237	22	22	22	154	694	1,136	44·33	2,172	13·06	1,052	2,152			
[illegible]m Sohana ..	..	Kalangaon ..	..	..	..	..	..	244	22	22	22	69	419	863	21·46	1,904	7·31	455	1,067			
[illegible] Kanta Sarkar ..	..	Sipahar ..	..	..	..	..	..	140	23	22	22	32	114	896	1,578	41·53	2,707	12·76	385	143			
[illegible] [illegible] Das ..	..	.. .. ..	..	..	..	..	..	140		..	2	11	73	87	2·65			..	..			
Kanailal Das ..	..	Benchāri ..	..	..	..	..	..	174	17	17	17	80	257	480	30·62	1,824	10·74	866	249			
Bireswar Ram Datta ..	..	Western ..	..	Darrang	..	Tezpur	..	86	10	25	25[illegible]	71	476	637	38·97	6,641	3·76	1,844	1,200	‡ Mandals of both the circles are shown against Durga Ram, as he was in charge of both the circles, while the other man was employed in extension survey.		
Gopal Ram Das ..	..	Eastern ..	..	..	..	..	..	46	15	15	13	69	224	447	(a) 14·65	1,827	25·25	..	..	In extension survey at Holeswar and Baripara.		
								..	..	..	..	..	..	..	(b) 38·95							
[illegible]m Charan Das ..	..	Town ..	..	Nowgong	..	Nowgong	..	163	27	27	27	(a) 66	881	1,876	34·86	5,994	5·14	8,312	5,425			
												(c) 2	33	40	1·23							
												(f) 26	271	369	12·09							

(a) Independent check lines.

(b) Check lines run in extension survey.

(c) With superior officers.

* With 61 sheets.

† Employed in Bijni extension survey

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Name of Supervisor Kanungo.	Circle.	District.	Subdivision.	Area cadastrally surveyed.												Remarks.
				Number of villages tested.	Number of mauzahs.			Testing by check lines.						Testing without check lines.		
					Total number.	Whose papers examined.	Whose field work tested.	Number of lines.	Number of kanats.	Number of offsets.	Length of lines, in miles.	Area of fluctuating cultivation in jurisdiction, in acres.	Number of linear miles per square mile of fluctuating cultivation.	Number of fields tested.	Area, including jungle, in acres.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Rámrath Datta	Silghát ..	Nowgong ..	Nowgong ..	69	19	19	19	(a) 58 (b) 25	517 227	736 318	21'98 11'21	2,759	7'70	2,109	2,515	
Jai Rám Das	Deb ka ..	,, ..	,, ..	116	16	16	16	(a) 81 (b) 52	843 113	1,132 334	36'50 9'59	2,517	11'70	2,670	2,771	
Sib Náth Sarma	Raha ..	,, ..	,, ..	107	22	22	21	744	1,564	2,654	65'24	3,487	11'99	794	737	
Govinda Rám Datta	Dhing ..	,, ..	,, ..	47	21	..	21	84	889	1,744	38'75	7,525	3'39	787	1,015	
Madan Chandra Sarma	,, ..	,, ..	,, ..	28	..	..	20	(a) 43 (b) 29	557 304	932 444	24'43 12'52		3'75	331	225	
Govinda Ram Datta	Gerua ..	,, ..	,, ..	18	16	16	13	67	580	2,100	29'37	5,536	3'46	10	12	
Bhakat Rám Datta . ..	,, ..	,, ..	,, ..	29	16	16	15	(a) 38 (c) 9	590 21	731 32	30'55 0'66		3'03	405	793	
Lakshmi Ram Dás	Ghogua ..	,, ..	,, ..	97	19	19	19	152	1,146	1,795	60'21	5,339	7'22	1,229	1,450	
Titá Ram Gogai	Máyang ..	, ..	,, ..	103	11	11	11	(a) 82 (c) 3	733 28	936 34	40'16 1'29	2,586	10'26	1,433	629	
Manu Rám Talukdár	Northern ..	Sibságar ..	Golághát ..	(a)35 (b)10	25 ..	25 ..	25 ..	46 62	340 146	829 202	(a)18'27 (b)10'81	2,593	8'90	2,309 ..	1,396 ..	
Fuá Rám Mahanta ..	Southern ..	,, ..	,, ..	(a)20 (b) 4 (d)11	22 ..	22 ..	22 ..	54 65 28	225 208 70	468 130 77	(a)12'46 (b)15'50 (d. 7'16	1,011	28'22	5,491	5,830	
Mahi Rám Dás (junior)	Eastern ..	,, ..	Jorhat ..	(b) 6 (a) 3	10	10	5 3	6 3	80 18	77 27	(b) 2'51 (a) 1'52	1,013	2'54	.. 16	.. 8	
Bhola Ram Datta (Officiating) ..	,, ..	,, ..	,, ..	(f) 1 (e) 10		..	1 9	1 14	11 29	20 100	( ) 0'03 (d) 4'47		3'44	..	..	

K. R. T. Das ...	...	Southwestern	...	...	...	...	(a)41	37	17	17	78	137	782	(a)20·70	1,137	11·13	429	646				
							(c) 1				8	21	52	(c) 0·49								
Mahi Ram Das (Section) ...	...	Northwestern	...	...	...	...	(a)130	17	18	7	37	77	(a) 3·11	1,058	615·06	1,184	603	489				
							(b)324	23	2	15	71	504	829	(b)123·70								
							(c) 2	...	1	3	40	31	(c) 1·58			..	..					
Mani Ram Da ...	...	Manik ...	...	...	...	...	72	13	12	19	128	1,320	2,138	(a)52·43	4,110	8·16	830	1,016				
											(a)331	277	511	11·35								
Sib Ram Bora ...	...	Eastern ...	...	...	Sadr ...		744	13	18	12	(c) 2	18	13	0·64	2,087	3·54	413	300·80				
											(c)136	373	351	10·59								
Meher Uddin Bora ...	...	Central ...	...	...	...	...	(a)150	17	6	3	(a)38	35	107	1·51								
							(b) 2		..	2	2(b)	51	26	1·56	1,275	3·52	331	11·12				
Govinda Nath Roy ...	...	...	...	...	...	...	..	..	(a)12	15	(a)112	150	80	5·51								
							(b) 2	..	..	1	(b)24	..	..	0·23								
							(a)20	33	33	20	(a)48	215	365	11·79								
Labi Ram Chaudhuri ...	...	Western ...	...	...	...	...	..	..	..	..	(b)12	15	16	0·75	2,744	3·62	336	232·07				
							..	..	..	..	(c)17	..	..	3·74								
Maheswar Das ...	...	Dikrugarh ...	...	Lakhimpur ...	Dikrugarh	...	61	14	14	14	47	204	289	11·21	843	8·35	1,242	1,664·72				
Chandreswar Sarma (Officiating)	...	...	...	...	...	...	...		8	..	..	..	..	..	..	..	..	..				
Lakhmi Kanta Das ...	...	Chabua ...	...	...	...	...	43	13	13	13	42	168	296	11·28	1,156	6·26	105	106·11				
Jagannath Deka ...	...	North Lakhimpur	...	...	...	North Lakhimpur	103	19	19	19	128	1,029	1,717	35·45	2,278	9·95	1,878	1,308·72				
Kamala Kanta (Officiating)	...	...	...	...	...	...	0	..	..	4	13	130	181	3·38		0·94	93	75·37				

(a) Independent check lines,
(b) Check lines run in extension survey

(c) With superior officers,
(d) Check lines run in the Assam-Bengal Railway.

APPENDIX F.

Work Statement of Tahsildars for the year 1894-95.

Number of Tahsildar.	Name of Tahsildar.	District.	Subdivision.	Area cadastrally surveyed.												Area not cadastrally surveyed.								Area found wrongly classed.			Remarks.
				Number of villages tested.	Total number.	Number of mandals. Whose papers examined.	Whose fieldwork tested.	Testing by check lines. Number of lines.	Number of chainages.	Number of checks.	Length of lines, in miles.	Area of fluctuating cultivation to introduce in survey, in acres.	Number of linear miles per square mile of fluctuating cultivation.	Testing without check lines. Number of fields tested.	Area, including jungle, in acres.	Number of villages tested.	Number of mandals. Total number.	Whose papers examined.	Whose fieldwork tested.	Total area as shown by mandalars, in acres.	Total area as shown by temporary measurement, in acres.	Percentage of error.	Area of concealed cultivation discovered, in acres.	*Bastí* shown as *Bastí*, in acres.	*Fastugara*, in acres.	*Bata* shown as *jarugadi*, in acres.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	Nrittya Chandra Mukharji	Puri	Gop Subdivision	Dhalua	11	13	2	17	72	245	508	10759	947	7·35	13	...	...	...	...	...	...	...	...	...	...	...	
	Lunga Chandra Chaudhuri	Puri	Khurda	Barpeta	6	21	...	3	3	91	173	1771	1,444	0·73	320	0·3684	...	...	...	...	...	...	...	...	...	...	Independent check-lines.
	Hrishikesh Datta	Puri	,,	Barpeta	4	21	1	3	1	76	130	0·68	1,407	0·74	108	414·89	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
	Aswini Chandra Singh	Puri	,,	Rahá	15	14	11	7	22	104	197	10·48	7,079	0·38	196	9·0983	2	...	...	...	...	...	...	...	...	...	Ditto ditto.
	Lakshmidhar Mahanti	Puri	,,	Gauhati	...	11	...	...	...	...	...	...	1,743	...	...	...	4	7	2	2	541	579	7·08	...	...	...	
	Narendra Ram Chaudhuri	Puri	,,	Phulabari	...	...	...	3	6	75	97	5·33	423	4·36	1	...	1	...	1	373	377	1·08	4	...	...	...	Ditto ditto.
	Nilmani Lal Chakabarti	,,	,,	,,	...	22	...	...	...	...	...	...	6,078	0·32	...	...	3	1	...	1	46	46	...	...	...	...	
	Chandi Ram Das	Puri	Boko	Boko	6	23	15	7	11	172	333	17·31	6,505	1·01	530	1,616	5	11	9	2	213	135	0·32	5	...	...	Ditto ditto.
					6				5	74	26	1·56			...	...											
	Ditto	,,	Pátsdarrang	,,	3	31	2	2	2	33	110	104	3·28	441	0·60	622	813	...	...	...	...	...	...	...	...	...	Independent check lines in extension survey.
					3				3	33	26	0·88			92	27											Ditto ditto.
	Ratna Kánta Barua	Puri	Hásanpur	,,	82	37	37	19	43	607	864	30·32	13,108	3·14	...	...	3	3	3	3	852	143	4·25	...	...	...	Independent.
	Ratna Kánta Barua	Puri	Kálhari	,,	4		...	4	6	153	71	3·33			...	...											Ditto,
	Sambidhar Sarma	Puri	,,	,,	8	19	19	6	31	2·16	233	7·86	14·55	1·48	1,095	189											
	Paramánanda Chaudhuri	Puri	Támbulpur	,,	7	18	...	6	15	74	175	5·33	2,835	2·02	129	361	6	3	...	3	276	371	1·81	...	263	9	...	Ditto check lines.
					5		...	4	14	102	213	5·82			187	572											Ditto ditto.
	Chintamani Das	Puri	Faráma	,,	23	18	7	11	42	491	683	17·18	5,146	0·56	3,472	2,773	...	...	...	...	...	...	...	...	...	...	Independent check lines in extension survey areas.
	Kali Rana Chaudhuri	Puri	Chilká Subdivision	,,	3	9	3	4	4	83	73	3·06	1,284	0·87	153	109	50	5	...	9	971	977	...	...	...	...	...	
	Radha Nath Sarma	Puri	Lanjeswar	,,	17	25	2	8	51	421	518	20·29	13,116	7·14	135	1,029	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
	Mahendra Nath Sinha	Puri	Dharrang	Mangedhai	13	12	12	7	16	138	171	4·38	937	2·84	...	...	2	3	3	...	70	68	2·86	...	...	...	Independent.
	Dhananjay Patra	Puri	,,	Kalimandi	25	24	24	14	19	2·1	122	3·63	1,083	0·48	196	339	...	...	...	...	...	...	...	...	...	...	Ditto,
	Shyámasundar Sarma	Puri	,,	Shyámasundar	1	23	...	1	1	24	31	1·28	2,267	0·13	...	...	...	...	...	...	...	...	...	...	...	...	
	Rabi Chandra Sarma	Puri	Tergur	Tergur	18	9	...	7	14	86	228	6·22	2,230	1·80	77	80·99	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
	Gauri Nath Sarma	Puri	Oyma	Oyma	5	9	9	4	17	73	135	3·58	...	...	5	...	...	7	7	4	126·38	152·72	2·93	...	...	...	Independent check lines in extension survey areas.
	Sant Das Hazarika	Puri	Sadar	Nowgong	5	9	9	4	17	73	135	3·58	...	...	5	...	...	7	7	4	48·26	50·24	...	...	...	...	Independent.
	Chintamani Kanta Barua	Puri	Sámaguri	,,	6	14	14	4	10	70	75	4·00	2,163	0·62	...	...	...	...	...	...	...	...	...	...	...	...	Ditto,
	Radha Nath Barua	Puri	Rahá	,,	6	13	11	5	8	81	106	1·70	2,127	0·63	485	216	...	1	1	...	...	...	...	...	...	...	Ditto ditto check lines.
	Chandidhar Barua	Puri	Gobardhan	Silimapur	9	22	22	7	9	135	197	7·04	2,187	1·14	210	432	...	...	...	...	...	...	...	...	...	...	
	Ratna Kánta Barua	Puri	Jatni	Jatni	5	16	5	3	3	23	11	0·63	841	0·72	3	13	...	...	...	...	...	...	...	...	...	...	
	Harimohan Datta Barua	Puri	Námti Subdivision	Sadar	5	14	6	4	10	91	198	8·13	1,231	3·16	...	...	1	1	1	1	1·15	1·30	13·04	...	...	...	
					7	31	15	2	9	61	84	2·56	5,455	0·23	...	...											
Total	...	...	...	...	281	471	270	151	414	3,189	5,710	230·13	109·01	0·46	7,2,1	11,005·13	74	81	32	30	2,037·69	2,258·45	1·48	9	263	14	93	

APPENDIX G.

Work Statement of Mauzadars and Tahsil Muharrirs for the year 1894-95.

District.	Subdivision.	Total number of mauzadars and muharrirs who did any test work.	Area cadastrally surveyed: Number of villages tested.	Number of mauzadars: Total number.	Number of mauzadars: Whose papers examined.	Number of mauzadars: Whose fieldwork tested.	Testing by check lines: Number of lines.	Number of errors.	Number of offsets.	Testing by check lines: Length of lines, in miles.	Testing by check lines: Area of cadastral cultivation, in acres.	Number of times miles per square mile of fluctuating cultivation.	Testing without check lines: Number of fields.	Testing without check lines: Area, including jungle, in acres.	Area not cadastrally surveyed: Number of villages.	Number of mauzadars: Total number.	Number of mauzadars: Whose papers examined.	Number of mauzadars: Whose fieldwork tested.	Total area in acres as shown by mauzadars.	Total areas found by remeasurement.	Percentage of error.	Area in acres of extended cultivation discovered.	Area found wrongly classified: Rupit.	Area found wrongly classified: Rupit shown as Sarrugati.	Remark.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Acres. 24	Acres. 25	26
Goalpara	Dhubri	4	..	..	..	..	..	..	..	..	..	..	..	..	10	6	6	6	1,054	1,218	7·82	4	3	2	10
	Goalpara	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kamrup	Barpeta	7	40	16	14	15	63	597	861	2716	16,165	1·13	212	4,130	6	14	6	5	1,183	1,185	0·21	..	..	..	..
	Gauhati	7	3	4	2	2	3	27	31	1·20	585	0·87	169	230	..	..	..	..	..	..	..	..	..	..	..
Darrang	Mangaldai	7	31	13	13	12	45	316	362	18·54	2,166	5·50	142	237	5	3	3	3	65	70	13·50	4	..	..	..
	Tezpur	3	4	7	7	3	12	72	112	7·18	1,703	3·69	..	..	..	..	..	..	..	..	..	..	..	..	..
Nowgong	Nowgong	3	20	20	12	8	14	126	188	5·45	6,602	0·53	13	225	18	5	5	3	25	81	63·00	1	..	..	..
Sibsagar	Golaghat	3	10	13	13	8	10	111	99	3·68	1,663	1·50	104	46	5	3	3	3	83	83	..	..	..	..	..
	Jorhat	(a) 7	17	30	9	12	15	108	188	4·14	4,122	0·88	240	236	2	11	1	2	11	10	10	..	..	..	..
		(b) 3					3	29	21	0·56			..	..	..	..	..	..	..	..	..	..	..	..	..
		(c) ..		2	1	1	1	20	36	0·47			..	..	..	..	..	..	..	..	..	..	..	..	..
	Sadr	4	8	18	8	4	13	102	86	3·33	2,565	0·82	158	219	..	..	..	..	..	..	..	..	..	..	..
Lakhimpur	Dibrugarh	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	North Lakhimpur	2	4	2	2	2	8	82	93	2·13	2·8	0·25	..	..	5	1	1	1	200	280	28·57	80	..	0·05	11·42
Total	..	40	143	133	83	67	187	1,558	2,017	70·03	30,713	1·33	1,438	5,413	51	43	25	23	3,519	3,047	3·97	89	3	2·05	21·42

Permanently settled.
All independent check lines, of which 18 lines, 7·35 miles in length, with 122 *L. shows* and 227 offsets, were run in extension survey areas.
Independently.

(a) Independent.
(b) In extension survey.
(c) In company with Sub-Deputy Collector.

APPENDIX H.

Statement showing the area of each Supervisor Kununggo's Circle in the cadastrally-surveyed portions of the Assam Valley Districts and Sylhet.

Subdivision.	Name of Supervisor Kununggo's circle.	*Mafákhirij.*	*Lakhiraj.*	*Khiraj* cultivation.	*Khiraj* waste.	Grants.	Total.
		Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.
Karimganj ...	Pratábgarh	...	...	29·31	34·46	54·49	118·26*
North Sylhet (Jaintia)	Kándighát	1·97†	1·17	104·03	14·99	6·80	128·96
	Kharil	0·18†	0·46	67·88	36·00	...	104·53‡
	Áráikhán	0·94	9·14	81·58	47·93	2·65	142·24
	Goáinghát	0·13†	0·44	62·19	42·72	2·98	108·46
	Total Jaintia	3·22†	11·21	315·68	141·64	12·43	484·18
	Total Sylhet	3·22	11·21	344·99	176·10	66·92	602·44
Barpeta	Baijáli	22·82	0·71	64·06	50·06	...	137·65
	Barpeta	8·04	0·77	32·01	94·82	...	135·64
	Raha	22·21	0·20	35·58	158·72	...	216·71
	Total	53·07	1·68	131·65	303·60	...	490·00
Gauhátti ...	Beltala	3·16	0·56	25·16	48·45	1·81	79·14
	Palásbári	10·86	2·22	95·07	53·78	1·58	163·51
	Boko	1·15	1·19	28·29	138·10	...	168·73
	Háfo	28·62	19·62	50·71	35·61	1·57	136·13
	Barkhettri	3·41	0·49	31·82	44·02	...	79·74
	Barigog	24·57	1·19	34·91	41·32	...	101·99
	Pánguri	24·60	2·84	37·17	26·19	0·71	91·51
	Nalbári	23·46	1·45	80·56	11·75	0·72	117·94
	Támbulpur	4·65	0·45	38·28	111·60	0·63	155·66
	Barama	15·19	3·36	56·19	65·30	...	140·04
	Pátidarrang	39·82	10·79	56·19	38·08	0·80	145·68
	Total	179·49	44·16	534·35	614·20	7·87	1,380·07
	Total Kámrúp	232·56	45·84	666·00	917·80	7·87	1,870·07
Mangaldai ...	Mangaldai	11·83	1·68	55·60	100·57	10·50	180·18
	Káláigáon	28·05	2·04	59·37	121·88	11·26	222·60
	Supájhar	4·50	0·58	54·23	77·73	0·32	137·36
	Bengbári	...	0·26	46·24	110·68	4·65	161·83
	Total	44·38	4·56	215·44	410·86	26·73	701·97

* There is no supervisor kanungo at Pratábgarh, but there are four *patwáris* under the supervision of the Sub-Deputy Collector of Karimganj.

† Represents permanently-settled area. The figures are subject to revision.

APPENDIX H—*continued.*

Subdivision.	Name of Supervisor Kanungo's circle.	*Nigháhi's.*	*Lakhiráj.*	*Khirái* cultivation.	*Khirái* waste.	Grants.	Total.
		Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.
Tezpur ...	Eastern	2·23	0·59	43·28	43·05	1·74	90·89
	Western	0·22	0·03	24·33	65·33	...	89·91
	Total	2·45	0·62	67·61	108·38	1·74	180·80
	Total Darrang	46·83	5·18	283·05	519·24	28·47	882·77
Nowgong ...	Town	1·70	0·84	92·04	85·83	1·47	181·88
	Silghát	3·16	1·44	63·58	54·37	6·42	128·97
	Doboka	0·12	0·26	42·18	65·96	10·71	119·23
	Raha	0·03	...	60·76	87·99	1·56	150·34
	Dhing	3·49	0·05	40·57	115·20	1·55	160·86
	Gerua	...	...	17·51	102·77	...	120·28
	Ghugua	0·13	0·19	34·36	71·10	...	105·78
	Máyang	...	...	13·64	76·66	0·65	90·95
	Total	8·63	2·78	364·64	659·88	22·36	1,058·29
Golághát ...	Northern	0·69	0·40	83·14	75·96	20·93	181·12
	Southern	0·20	1·37	82·70	53·15	15·60	153·02
	Total	0·89	1·77	165·84	129·11	36·53	334·14
Jorhát ...	Eastern	0·55	0·23	77·21	67·66	22·33	167·98
	North-western	0·93	9·00	93·68	54·72	34·70	193·03
	South-western	1·26	5·43	66·12	48·12	42·72	163·65
	Májuli	0·03	34·92	20·22	94·51	0·68	150·36
	Total	2·77	49·58	257·23	265·01	100·43	675·02
Sibságar sadr ...	Eastern	0·23	2·91	54·06	177·54	38·38	273·12
	Central	0·38	0·04	60·53	70·46	12·72	144·13
	Western	0·54	0·24	100·48	89·81	40·08	231·15
	Total	1·15	3·19	215·07	337·81	91·18	648·40
	Total Sibságar	4·81	54·54	638·14	731·93	228·14	1,657·56
Dibrugarh ...	Chábua	1·27	0·10	38·99	42·74	10·69	93·79
	Dibrugarh	0·24	...	47·50	18·11	30·28	96·13
	Total	1·51	0·10	86·49	60·85	40·97	189·92
North Lakhimpur ...	North Lakhimpur	0·37	2·67	38·31	2·54	0·51	44·26
	Total Lakhimpur	1·88	2·77	124·80	63·39	41·48	234·18

APPENDIX I.

Statement showing the condition of Theodolite Marks on 30th June 1894.

Subdivision.	Classification.	Total number (6+7+8).	Total number found in good order by mandals.	Total number found not in good order by mandals.		Total of columns 4 and 5, or total in good order on 30th June 1894	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
Karimganj (Pratábgarh).	Prisms*	224	178	...	...	178	46
	Simul, &c., boughs* ...	1,574	...	1,565	...	1,565	„ 9
	Total Karimganj ...	1,798	178	1,565	...	1,743	55
Barpeta ...	Prisms	612	607	...	...	607	5
	Jungle mounds	236	53	11	...	64	172
	Simul boughs	4,939	2,786	1,536	534	4,322	83
	Kanungos' *dhips* ...	501	383	109	9	492	...
	Total Barpeta	6,288	3,829	1,656	543	5,485	260
Gauháti ...	Prisms	2,977	2,855	61	1	2,916	60
	Jungle mounds	1,132	791	232	48	1,023	61
	Simul boughs	4,808	2,111	2,004	535	4,115	158
	Kanungos' *dhips* ...	2,549	1,546	834	140	2,380	29
	Total Gauháti	11,466	7,303	3,131	724	10,434	308
Mangaldai ...	Prisms	1,947	1,941	...	...	1,941	6
	Jungle mounds	36	36	...	...	36	...
	Simul boughs	6,705	3,893	2,690	55	6,583	67
	Kanungos' *dhips* ...	117	62	55	...	117	...
	Brick prisms	31	31	...	...	31	...
	Total Mangaldai ...	8,836	5,963	2,745	55	8,708	73
Tezpur ...	Prisms	382	347	21	9	368	5
	Jungle mounds	6	6	...	...	6	...
	Simul boughs	1,910	951	648	213	1,599	98
	Kanungos' *dhips* ...	36	32	2	...	34	2
	Total Tezpur	2,334	1,336	671	222	2,007	105
Nowgong ...	Prisms	2,521	2,176	336	8	2,512	1
	Jungle mounds	703	546	113	44	659	...
	Simul boughs	12,145	4,828	6,857	380	11,685	80
	Kanungos' *dhips* ...	236	90	146	...	236	...
	Total Nowgong ...	15,605	7,640	7,452	432	15,092	81

Besides prisms and *Simul* boughs, there are 152 brick pillars and 52 pipes in Pratábgarh, regarding which detailed information has not been received.

APPENDIX I—*continued.*

Subdivision.	Classification.	Total number (6+7+8).	Total number found in good order by mandals.	Total number found not in good order by mandals.		Total of columns 4 and 5, or total in good order on 30th June 1894.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
Golághát	Prisms	575	382	175	7	557	11
	Jungle mounds	36	9	27	...	36	...
	Simul boughs	5,327	561	3,953	691	4,514	122
	Kanungos' *dhips*	34	...	14	20	14	...
	Total Golághát	5,972	952	4,169	718	5,121	133
Jorhát	Prisms	1,190	1,183	.	5	1,183	2
	Jungle mounds	18	...	3	15	3	...
	Simul boughs	10,140	4,022	3,589	1,382	7,611	1,147
	Kanungos' *dhips*	250	147	77	26	224	...
	Total Jorhát	11,598	5,352	3,669	1,428	9,021	1,149
Sibságar sadr	Prisms	914	896	...	...	896	18
	Jungle mounds	314	311	...	3	311	...
	Simul boughs	10,664	4,496	4,497	830	8,993	841
	Kanungos' *dhips*	7	2	5	...	7	...
	Total Sibságar sadr	11,899	5,705	4,502	833	10,207	859
Dibrugarh	Prisms	345	344	..	...	344	1
	Jungle mounds	...	...	...	...	...	...
	Simul boughs	2,846	756	1,284	799	2,040	7
	Kanungos' *dhips*	34	34	...	...	34	...
	Total Dibrugarh	3,225	1,134	1,284	799	2,418	8
North Lakhimpur	Prisms	210	208	...	.	208	2
	Jungle mounds	...	...	...	...	...	...
	Simul boughs	1,521	1,074	154	291	1,228	2
	Kanungos' *dhips*	...	...	...	...	...	...
	Total North Lakhimpur	1,731	1,282	154	291	1,436	4
Total	Prisms	11,897	11,117	593	30	11,710	157
	Jungle mounds	2,481	1,752	386	110	2,138	233
	Simul boughs	62,579	25,478	28,777	5,710	54,255	2,614
	Kanungos' *dhips*	3,764	2,296	1,242	195	3,533	31
	Brick prisms	31	31	...	...	31	...
	Grand total	80,752	40,674	30,998	6,045	71,672	3,035

APPENDIX J.

Statement showing Advances and Recoveries on account of Cadastral Survey Operations during 1894-95.

District.	Advances made on account of	Outstanding on 31st March 1894.	Advances made during 1894-95.	Total for recovery on 31st March 1895.	Recovered during 1894-95.	Balance outstanding on 31st March 1895.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Cachar ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	8,764 12 8	10,330 13 0	19,095 9 8	...	19,095 9 8
Sylhet ...	Pratábgarh—					
	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	633 1 1	...	633 1 1	...	633 1 1
	Jaintia—					
	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	5,075 6 2	11,803 7 1	16,878 13 3	...	16,878 13 3
	(3) Demarcation of grants, permanently settled and *lákhiráj* (revenue-free) estates—					
	(b) Prisms ...	...	606 0 0	606 0 0	...	606 0 0
	Total	5,708 7 3	12,409 7 1	18,117 14 4	...	18,117 14 4
Kámrúp ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	3,041 14 5*	...	3,041 14 5	3,003 12 7†	38 1 10
	(2) Demarcation of village trijunction points in the areas surveyed by local agency.	...	2,554 8 0	2,554 8 0	...	2,554 8 0
	(3) Demarcation of grants, *lákhiráj* (revenue-free), and *nisf-khiráj* (half revenue-paying) estates—					
	(a) Concrete blocks ...	10,093 4 3	15,452 14 0	25,546 2 3	...	25,546 2 3
	(b) Prisms	...	4,712 7 0	4,712 7 0	...	4,712 7 0
	Total	13,135 2 8	22,719 13 0	35,854 15 8	3,003 12 7	32,851 3 1
Darrang ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	4,303 11 10	...	4,303 11 10	2,810 0 0	1,493 11 10
	(2) Demarcation of village trijunction points in the areas surveyed by local agency.	...	184 8 0	184 8 0	...	184 8 0
	(3) Demarcation of grants, *lákhiráj* revenue free, and *nisf-khiráj* (half revenue-paying) estates—					
	(a) Concrete blocks ...	989 0 4	806 3 11	1,795 4 3	...	1,795 4 3
	(b) Prisms	...	1,844 4 9	1,844 4 9	...	1,844 4 9
	Total	5,292 12 2	2,835 0 8	8,127 12 10	2,810 0 0	5,317 12 10

* Inclusive of Rs. 3764 recoverable from the Khás of Gauhati.
† Inclusive of Rs. 3663-4 recovered from the Khás of Gauhati.

APPENDIX J—*continued.*

District.	Advances made on account of	Outstanding on 31st March 1894.	Advances made during 1894-95.	Total for recovery on 31st March 1895.	Recovered during 1894-95.	Balance outstanding on 31st March 1895.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Nowgong ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	6,976 12 5	126 8 4	7,103 4 9	...	7,103 4 9
	(2) Demarcation of village trijunction points in the areas surveyed by local agency.	...	615 2 0	615 2 0	...	615 2 0
	(3) Demarcation of grants, *lákhiráj* (revenue-free), and *nisf-khiráj* (half revenue-paying) estates—					
	(*a*) Concrete blocks ...	540 8 3	84 6 6	624 14 9	...	624 14 9
	(*b*) Prisms	...	178 2 0	178 2 0	...	178 2 0
	Total	7,517 4 8	1,004 2 10	8,521 7 6	...	8,521 7 6
Sibságar ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	18,018 6 3*	...	18,018 6 3	9,423 9 1	8,594 13 2
	(2) Demarcation of village trijunction points in the areas surveyed by local agency.	500 0 0†	832 8 0	1,332 8 0	...	1,332 8 0
	(3) Demarcation of grants, *lákhiráj* (revenue-free), and *nisf-khiráj* (half revenue-paying) estates—					
	(*a*) Concrete blocks ...	1,149 3 6	5,136 6 2	6,285 9 8	200 0 0‡	6,085 9 8
	(*b*) Prisms	...	11,640 1 9	11,640 1 9	...	11,640 1 9
	(*c*) Pav, &c., of demarcation kanungos.	...	30 0 0	30 0 0	...	30 0 0
	Total	19,667 9 9	17,638 15 11	37,306 9 8	9,623 9 1	27,683 0 7
Lakhimpur ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	3,938 10 4	...	3,938 10 4	2,937 12 4	1,000 14 0
	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	50,752 11 2	22,260 12 5	73,013 7 7	18,175 2 0	54,838 5 7
	(2) Demarcation of village trijunction points in the areas surveyed by local agency.	500 0 0†	4,186 10 0	4,686 10 0	...	4,686 10 0
Total ...	(3) Demarcation of grants permanently settled, *lákhiráj* (revenue-free), and *nisf-khiráj* (half revenue-paying) estates—					
	(*a*) Concrete blocks ...	12,772 0 4	21,479 14 7	34,251 14 11	200 0 0‡	34,051 14 11
	(*b*) Prisms		18,980 15 6	18,980 15 6		18,980 15 6
	(*c*) Pav, &c., of demarcation kanungos.	...	30 0 0	30 0 0	...	30 0 0
	Grand total	64,024 11 6	66,938 4 6	1,30,963 0 0	18,375 2 0	1,12,587 14 0

* The balance on the 31st March 1894 was Rs. 18,518-6-3, of which Rs. 500, on account of price of certain unused prisms, which will be utilised in connection with the demarcation of the oolite stations in the areas surveyed by local agency, has been transferred to head (2).

† Transferred from head (1), *ibid.*

‡ Recovered.

APPENDIX K.

Statement of Rainfall Stations and Instruments for the year 1894-95.

District.	Number of stations on 31st March 1894.			Number abolished during the year 1894-95.	Number added during the year 1894-95.	Number of stations on 31st March 1895.			Number of Government instruments in the district on the 31st March 1895.				Remarks.
	Government.	Private.	Total.			Government.	Private.	Total.	Symons's gauges.	Measuring glasses.	Spirit levels.	5-inch measuring gauges.	
Cachar ...	3	7	10	...	1	3	8	11	11	22	3	3	The new station added is Jatinga Valley. The Silchar station is under the direct management of the Meteorological Reporter to the Government of India.
Sylhet ...	5	7	12	...	...	5	7	12	11	27	...	...	The Sephinjuri Bheel station has one rain-gauge and one measure glass of its own.
Goálpára ...	5	1	6	...	...	5	1	6	7	14	...	2	The Dhubri station is under the direct management of the Meteorological Reporter to the Government of India.
Kámrúp ...	11	5	16	...	...	11	5	16	16	24	2	...	
Darrang ...	3	9	12	..	1	3	10	13	13	26	4	...	The new station added is Orangajuli.
Nowgong ...	1	6	7	1	1	1	6	7	7	14	...	...	The rain-gauge at Kapili has been transferred to Lanka.
Sibságar ...	3	8	11	...	...	3	8	11	11	21	...	...	The Sibságar sadr station has an observatory, and is under the direct management of the Meteorological Reporter to the Government of India.
Lakhimpur ...	4	8	12	...	...	4	8	12	12	23	...	...	
Nága Hills ...	4	1	5	...	...	4	1	5	5	10	...	...	
Khási and Jaintia Hills ...	3	...	3	...	1	3	1	4	4	8	...	1	The new station added is Mauphlong.
Gáro Hills ...	1	...	1	...	...	1	...	1	1	2	1	1	The Tura station is under the direct management of the Meteorological Reporter to the Government of India.
Manipur ...	1	...	1	...	...	1	...	1	1	1	...	...	
North Lushai ...	1	...	1	...	1	2	...	2	2	2	2	2	The new station added is Sairang.
Total	45	52	97	1	5	46	55	101	101	195	12	9	

A SIM SECRETARIAT PRINTING OFFICE (REV.) NO. 148—340—22-7 95.

Remarks on the Report of the Department of Land Records and Agriculture, Assam, for 1894-95.

It is requested that any reply, or future reference to this communication may quote its number, distinguishing letter, and date.

No. 201 Agri. / 3898 R.

FORM A

THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM,

TO

THE DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM.

Shillong, the 20th September 1895.

SIR,

I AM directed to communicate the following remarks of the Chief Commissioner upon your Report on the Operations of the Department of Land Records and Agriculture, Assam, during the year 1894-95:

2. *Paragraphs* 2, 3, 4, & 5.—From these paragraphs the Chief Commissioner observes that you were on tour for 175 days, and Mr. O'Donel, the Superintendent of Land Records, for 311 days, which is a very satisfactory record; the Chief Commissioner is also well pleased with the amount of inspection work you and Mr. O'Donel were able to accomplish during the time you were on tour. The amount of touring done by the Sub-Deputy Collectors was also very satisfactory during the past year. On the other hand, in only 14 out of a total of 40 circles did the supervisor kanungos in charge come up to the required standard of 200 days on tour. It is observed that many of those who failed, have been punished, and that you have arranged to give this class of officers more time for touring by relieving them of some of the office work hitherto assigned to them.

3. *Paragraph* 6.—The Chief Commissioner agrees with you that the Dibrugarh Survey School, though an expensive one, must be maintained. There is no district in the Assam Valley where the mandals are so incompetent as they are in the Lakhimpur district, and every effort must be made to secure qualified men for these appointments as they fall vacant. The Chief Commissioner is glad to hear that the Jorhat Survey School is doing useful work, but the examination results of the three schools are poor. From the Gauhati school, 9 candidates and no mandals succeeded in passing the first-class certificate examination, and 48 candidates and only 4 mandals passed the second-grade certificate examination. The Dibrugarh and Jorhat schools passed only 9 mandals and 14 candidates at the examinations held for second-class certificates; it is understood that there is at present no course of instruction in these schools for first-class certificates. The Chief Commissioner assumes that steps will be taken before long to open such a course. In addition to the candidates and mandals who passed from the three survey schools, 5 outsider candidates and 3 outsider mandals passed at the examination centres.

4. *Paragraph* 7.—The Chief Commissioner notices that 13 out of the 29 tahsildars now employed in the Brahmaputra Valley have passed in practical surveying, and that 7 have been exempted from passing. Mr. Ward agrees with you in thinking that the tahsildars in the Surma Valley should be required to take their share in supervising and testing the work of the patwaris who are being appointed to keep the settlement maps and records up to date, and the Deputy Commissioners will be requested to make arrangements for deputing them to the survey camp next cold weather.

5. *Paragraphs* 8 & 9.—The statement given in paragraph 8 is interesting. It shows that out of 112 mauzadars in the Brahmaputra Valley on the 31st March 1895, 13 had secured first-class certificates and 29 second-class certificates, and that out of 953 mandals, 128 and 636 had secured first and second-class certificates, respectively. Of 56 patwaris appointed in Jaintia and Pratabgarh in the Surma Valley, 12 had secured first-class and 28 second-class certificates. The Chief Commissioner is glad to notice that in Kamrup, Nowgong, and Darrang the proportion of mandals who have not succeeded in obtaining any certificate is small. In Sibsagar, however, one-third, and in Lakhimpur nearly two-thirds, of the mandals are not certificated. Out of a total of 948 mandals in the Assam Valley, only 84 had succeeded in getting into the first grade on Rs. 12 a month; 279 were in the second grade on Rs. 9; and the large number of 641 were still in the lowest grade on Rs. 6. The report does not explain why there are not more mandals in the higher grades, seeing that the sanctioned strength is 204 in the first grade and 308 in the second; and the statement in paragraph 8 shows apparently that there are 128 men holding first-class certificates and, therefore, eligible, if otherwise qualified, for the first grade, and 635 holding second-class certificates, who are similarly eligible for the second grade. It is, however, understood that these certificate-holders, though qualified by examination results, have been found in the course of your inspections unfit for promotion owing to the inferior quality of their work. This point is of some importance in view of certain proposals which you have recently submitted for raising the pay of the existing three grades of mandals. If men cannot be found fit for promotion to the numerous vacancies there are at present in the two higher grades, the Chief Commissioner doubts whether the time has yet come for increasing the pay of mandals in any of the three existing grades.

6. *Paragraphs* 12, 13, & 23.—The amount of inspection of the papers of mandals and supervisor kanungos done by yourself and the Superintendent of Land Records was very satisfactory. The result of the inspections as given in detail in paragraph 12 for each district shows, on the whole, an improvement on the previous year; but there are still many faults to be remedied, especially in the Kamrup district, where the erection and maintenance of survey marks is said not to receive proper attention. In nearly every district also, survey marks located in the jungle are said to be disappearing, owing to their remaining unvisited. It is understood that you have drawn the attention of the district officers to these matters. The Commissioner's attention will also be drawn to this part of the Report, with a view to his impressing upon the officers concerned the necessity of seeing that the mistakes pointed out are corrected, and more especially of insisting on a thorough inspection of all important survey marks, as well as their proper maintenance. The Chief Commissioner observes from paragraph 23 of the Report that each mandal has now a trace showing all survey marks in his circle, and that he is required to show in his diary what marks he visits every year, the condition in which he finds them, and whether he has had them repaired. If these traces show on their face as they should, the marks visited and repaired each year by the mandal or found by him to be in good order, the supervisor kanungo, Sub-Deputy Collector, and the district officer will be able to see at a glance what marks had not been visited, and to test, by an inspection here and there, the accuracy of the mandals' reports regarding the condition of these marks. The amount of inspection work done by the Sub-Deputy Collectors appears to have been fair on the whole.

7. *Paragraphs* 15 *to* 21 *and Appendices A to G to the Report* show the amount of office and field inspection work done—(1) by yourself and the staff under your control; (2) by Sub-Deputy Collectors; (3) by supervisor kanungos; (4) by tahsildars and mauzadars; and, lastly, by district and subdivisional officers. There has been a satisfactory increase all round of field testing work by check lines, which the Chief Commissioner is glad to notice, and the supervisor kanungos appear to have acted up to the instructions which have been recently issued for their guidance. The check lines run by district officers exceed more than double the length run in any previous years, but this is due to the exertions of three officers only. The Chief Commissioner notices that in the Gauhati, Mangaldai, Tezpur, Golaghat, and Dibrugarh subdivisions no attempt was made to test by check lines. The officers concerned will be called upon, through the Commissioner, for an explanation, in view of the orders passed on paragraph 14 of your Report for 1893-94. There is no doubt that district officers can do more testing work in the field than is done at present, and Mr. Ward must insist upon their paying more attention to this part of their duties. The same remarks apply to office inspections referred to in your 21st paragraph. Now that district officers have a set of questions to guide them in inspecting the mandals' papers in office, the Chief Commissioner will expect them to devote some of their time to this work, and not to leave everything to the Sub-Deputy Collector and the supervisor kanungo. The Chief Commissioner also entirely agrees with you that tahsildars should do more work than they have hitherto done in the direction of supervising the work of their mandals, both in office and in the field, and in seeing that the supervisors attached to the tahsil are working properly. He agrees with you in thinking that this result can be best obtained by requiring tahsildars to submit a weekly diary during the period the mandals are at headquarters writing up their settlement papers, showing the amount of testing carried out by them daily.

8. *Paragraph* 22.—The Chief Commissioner observes that the necessary steps are being taken in Jaintia, which has recently been cadastrally surveyed, to keep the survey maps and records up to date in the same way as is done in the Assam Valley.

I have the honour to be,

SIR,

Your most obedient Servant,

P. G. MELITUS,

Secretary to the Chief Commissioner of Assam.

MEMO. NO. $\frac{207 \text{ Agri.}}{109}$ R.

Shillong, the 20th September 1895.

COPY, with a copy of the Report, forwarded to the Commissioner of the Assam Valley Districts for information, special attention being invited to paragraphs 6 and 7 of the letter to the Director, Department of Land Records and Agriculture, Assam.

By order of the Chief Commissioner of Assam,

P. G. MELITUS,

Secretary to the Chief Commissioner of Assam.

A. S. P. O. (Rev.) No. 148—400—3-10-95.

ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

FOR

1895-96.

By F. J. MONAHAN, Esq., I.C.S.,

OFFG. DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE.

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FROM

F. J. MONAHAN, ESQ, I.C.S.,

Offg. Director, Department of Land Records and Agriculture, Assam,

To

THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Dated Shillong, the 30th June 1896.

SIR,

I HAVE the honour to submit the Thirteenth Annual Report, giving an account of the operations of this Department for the year ending the 31st March 1896.

2. Mr. Gait, the permanent Director of the Department, was in charge of it from the beginning of the year till the 8th June 1895, when he went on three months' privilege leave, making over charge to Rai Sarat Chandra Bánárji, Bábádur, Settlement Officer of Cáchár, who officiated for him during his absence. Shortly after his return from leave, Mr. Gait was deputed to act as Secretary to the Chief Commissioner of Assam, and made over charge to me on the 7th October 1895. I officiated as Director of Land Records and Agriculture, until the 11th December, when I was relieved by Mr. Gait, who remained in charge of the Department up to the close of the year.

I have the honour to be,

SIR,

Your most obedient Servant,

F. J. MONAHAN,

Offg. Director of Land Records and Agriculture, Assam.

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ASSAM

ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

FOR THE YEAR 1895-96.

Report writing.

DURING the year, the following reports were issued from the office of the Director of Land Records and Agriculture :

(1) The Departmental Report.
(2) The River-borne Trade Report.
(3) The Survey and Settlement Report.
(4) The Note on Crop Experiments.
(5) The Extension Survey Report.
(6) The Note on Foreign Trade, for incorporation in the General Administration Report.

Besides these, the Annual Land Revenue Administration Report for the province was drafted in the office as usual. Before Mr. Gait went on leave, a good deal of his time was occupied in preparing the draft of the Assam Land Revenue Manual now in the press, and in revising the list of registers maintained in the several districts of the province. The rules for survey schools were also revised. Mr. Gait also drew up three notes on subjects discussed at the Conference held on the occasion of Sir E. Buck's visit to Assam, in January 1896, and drafted, early in the same month, rules for the resettlement of the Cáchár district. A bulletin containing the names of field crops grown in Assam was published towards the end of the year.

Directors' tours.

2. On the 15th July, Rai Sarat Chandra Bánárji, Báhádur, Officiating Director, left Shillong for a short tour in the Brahmaputra Valley, returning to headquarters on the 2nd August. He visited in turn Tezpur, Dibrugarh, Dhubri, and Gauháti. At the two former stations, he personally supervised the work of marking on the printed maps of waste land grants and other special estates surveyed in the districts of Darrang and Lakhimpur during the season of 1891-92, the points at which boundary marks should be erected. He also discussed with the Superintendent of Land Records and Sub-Deputy Collectors concerned, the arrangements for extension surveys during the season of 1895-96 in each of the districts of Darrang, Lakhimpur, Goálpára, and Kámrúp, and for opening a class at Tezpur for the training of Sub-Deputy Collectors and kanungos in theodolite survey. At Dhubri, he inspected the Traffic Registration office and the progress of the cadastral survey of the town. On the 20th August, he again proceeded on tour in the Surma Valley, and inspected the Settlement offices at Sylhet, Silchár, and Karimganj, as well as the Traffic Registration station at Bhairab Bázár, returning to Shillong on the 10th September. Between the 14th November and the 9th December, I toured in the sadr subdivision of the Kámrúp district, inspecting the work of supervisor kanungos and mandals and the registrar kanungo's office at Gauháti. On the 15th December, Mr. Gait started on a tour in the Surma Valley. After inspecting, at Sálutikar and Sylhet, the progress of the Jaintia settlement, he paid a visit to Karimganj, where he inspected the work of the land records staff in the cadastrally-surveyed area in that subdivision. He then inspected the survey and settlement work in the Cachar district, and returned to Shillong on the 7th January. On the 11th January, Mr. Gait proceeded on tour in the Brahmaputra Valley, visiting in turn the subdivisions of Nowgong, Mangaldai, Tezpur, Dibrugarh, Sibságar, (Sadr) Jorhát, and Golághát. In the month of January, he accompanied Sir E. Buck, Secretary to the Government of India on special duty, in the tour made by him in the Kámrúp and Darrang districts, and attended the Agricultural Conference held at Gauháti towards the end of the month, at which the Chief Commissioner, Sir E. Buck, and Mr. Willson, the Director of Public Instruction, were present. Mr. Gait returned to Shillong on the 28th March. After taking over charge of the office of the Director of Land Records, in the month of April 1896, I made a tour in the Barpeta subdivision of Kámrúp and paid a flying visit to the headquarters of the Bijni tahsil in the Goálpára district. Mr. Gait inspected the offices of all the registrar kanungos, except those of Gauháti, Barpeta, and North Lakhimpur, and the work of 25 supervisor kanungos and

442 mandals employed in the cadastrally-surveyed area. I inspected the offices of the registrar kanungos of Gauháti and Barpeta and the work of 14 supervisor kanungos and 265 mandals. Mr. Harward, Assistant Commissioner, who was deputed on special duty with the permanent Director for 33 days in the months of February and March, inspected the work of one kanungo and 18 mandals of the North Lakhimpur subdivision. Thus, the work of all the 40 supervisor kanungos and of 725 out of 773 mandals in the cadastrally-surveyed area in the Brahmaputra Valley was inspected by Mr. Gait, Mr. Harward, or myself. Mr. Gait was on tour for 123 days during the year ending the 31st March 1896, Rai Sarat Chandra Bánárji Báhádur, for 41 days, and I for 26 days. In all, 190 days' touring was done by officers holding charge of the Department during the year.

Superintendent of Land Records' tours.

3. Mr. O'Donel, the Superintendent of Land Records, was on tour at the beginning of the year in the sadr subdivision of the Kámrúp district. In the first week of May, he conducted at Gauháti the annual examination for first-class survey school certificates, and during the latter part of that month he inspected the extension survey work in the Bijni tahsil. He then made a tour through both the subdivisions of the Kámrúp district, inspecting the work of the land records staff. From the 26th June to the 12th July, he inspected the work of mandals and kanungos in the Mangaldai subdivision, and from the 1st August to the 9th September, in all three subdivisions of the Sibságar district. He then made a tour of inspection in the Lakhimpur district, and returned to Tezpur on the 21st September. During the month of October, he was engaged at Tezpur in teaching the use of the theodolite to a class composed of one Sub-Deputy Collector, five supervisor kanungos, eleven mandals, and three candidates who were deputed for instruction from different districts of the Brahmaputra Valley.* On the 13th November, Mr. O'Donel left Tezpur, and proceeded on a tour through the Mangaldai subdivision, which lasted till the 6th December. He then went to Dhing in the Nowgong district to examine certain tahsildárs of that district in practical surveying, and afterwards to Gauháti to hold a second examination for first-class survey school certificates. In the last week of December, he inspected the work of the mandals of the Bijni tahsil in Goálpára district. He then made a second tour of inspection through both the subdivisions of the Kámrúp district, which occupied the months of January and February and the first ten days of March, holding, at the end of January, an examination of tahsildárs at Rangiya. From the 11th March to the close of the year he was on tour in the district of Nowgong. Mr. O'Donel has continued to show great activity in inspection, having inspected the work of the land records staff of every subdivision of the Assam Valley once, and in Mangaldai and Kámrúp twice. He was in camp altogether for 300 days during the year.

Sub-Deputy Collectors' tours.

4. The statement below shows briefly the touring done by the Sub-Deputy Collectors. Full particulars as to the manner in which they spent their time will be found in Appendix A :

Name.	Subdivision.	Number of days in charge.	Number of days on tour.			Remarks.
			In cadastral mandals.	In non-cadastral mandals.	Total.	
Bábu Purna Chandra Mitra ...	Karimganj ...	366	107	60	167	
„ Giris Chandra Dás ...	North Sylhet ...	315	100	...	100	
„ Harendra Kumár Ghosh ...	„ ...	51	...	...	...	
„ Tripura Charan Mukharji ...	Dhubri ...	325*	172	55	227	* Exclusive of 31 days spent at Tezpur in learning the use of the theodolite.
„ Rajani Kánta Bardalai ...	Barpeta ...	366	132	24	156	
„ Rái Kumár Rai ...	„ ...	146	87	...	87	
„ Bholánath Das	Gauháti ...	366	144	8	152	
„ Jajneswar Das Gupta ...	Mangaldai ...	284	134	4	138	
„ Harendra Kumár Ghosh ...	„ ...	82	58	...	58	
„ Krishna Chandra Chaudhuri	Tezpur ...	366	120	31	151	
„ Radha Mohan Das ...	Nowgong ...	283	132	5	137	
„ Rái Kumár Rai ...	„ ...	83	27	...	27	
Munshi Didárnddin Ahmed ...	Golághát ...	310	133	3	136	
Bábu Harendra Kumár Ghosh ...	„ ...	26	23	...	23	
„ Radha Kánta Hándiqui ...	Jorhát ...	366	165	...	165	
„ Phanidhar Chaliha ...	Sibságar Sadr	218	89	1	90	
„ Rái Kumár Rai ...	„ ...	134	103	...	103	
Munshi Mashiat Ullah ...	Dibrugarh ...	366	118	80	198	
„ Muhammad Sádir ...	North Lakhimpur.	366	93	79	172	

Eight Sub-Deputy Collectors were attached to the stations shown against their names throughout the year, and all of them were on tour for more than 150 days, which is the minimum period of touring prescribed for these officers. Bábu Tripura Charan Mukhárji, of Dhubri, spent the longest time in camp, *viz.*, 227 days. During a portion of this time, however, he halted at Bijni, where he had his temporary headquarters while supervising the extension surveys in Bijni tahsil. Munshi Mashiat Ullah came next with 198 days, and then Maulvi Muhammad Sádir with 172 days. In all the subdivisions shown in the statement, except North Sylhet, the total amount of touring done by the Sub-Deputy Collectors in charge during the year exceeded the prescribed minimum. In North Sylhet, only 100 days' touring was done by the Sub-Deputy Collector, who was chiefly occupied in supervising the office work of the pátwáris in connection with the forthcoming resettlement of the Jaintia parganas. The Sub-Deputy Collectors of Gauháti (Bábu Bholánáth Das), Barpeta (Bábu Rajani Kánta Bardalai), and Tezpur (Bábu Krishna Chandra Chaudhuri) only just exceeded the minimum amount of touring required by rule, which is not satisfactory, considering the importance of their charges. These Sub-Deputy Collectors appear to have been employed to an excessive extent on office work.

Supervisor kanungos' tours.

5. The touring done by the supervisor kanungos and the two surveyors at Gauháti and Dibrugarh is shown in detail in Appendix B. The statement given below shows that in 24 out of 44 supervisor kanungos' circles, the minimum amount of 200 days' touring prescribed by rule has been worked up to during the year. In every subdivision, except Sibságar Sadr and North Lakhimpur, the amount of touring has fallen short in one or more supervisor kanungos' circles. A good deal of the time of the supervisor kanungos of Jaintia (North Sylhet) was occupied in supervising the office work of the pátwáris in connection with the new settlement. In the other subdivisions the Sub-Deputy Collectors would appear to be to blame for the short touring done by the supervisor kanungos. The amount of touring was especially deficient in the Beltola circle of the Gauháti subdivision, in the Sipájhár and Kaláigaon circles of the Mangaldai, in the eastern circle of the Tezpur, and in the northern circle of the Golághát subdivisions. Supervisor kanungos Rámnáth Datta, of Silghát circle in Nowgong, and Minárám Dás, of Májuli circle in Jorhát, deserve credit for having done 220 and 202 days' touring respectively, though they were absent from their circles on deputation for nearly a month each. Supervisor Kanungo Mádhabrám Gágai, of Barama circle in Gauháti, spent the longest time on tour (268 days), but his work has been otherwise far from satisfactory. The surveyor at Gauháti was not in camp nearly enough during the year, and his outturn of work is generally insufficient. Much more use might be made of the surveyor's services in that heavy subdivision.

District.	Subdivision.	Name of circle.	Name of supervisor kanungo.	Number of days in charge.	Number of days on tour.	Remarks.
Sylhet ...	North Sylhet, Jaintia.	Circle No. I...	Sasikumár Kar* ...	265	97	* Joined on the 19th April 1895.
,, ...	,, ...	,, ,, ,,	Barada Kánta Gánguli (offg.)	83	67	
,, ...	,, ...	,, ,, II	Kámini Kumár De ...	277†	159	† Was on deputation to the Survey Camp in Cáchár for 89 days.
,, ...	,, ...	,, ,, III	Ábdur Sabbar ...	366	159	
,, ...	,, ...	,, ,, IV	Ambiká Charan Bánárji ...	366	164	
Kámrúp ...	Barpeta ...	Baijáli ...	Sháhábuddin ...	153	75	
,, ...	,, ...	,, ...	Purnánanda (offg.) ...	30	...	
,, ...	,, ...	,, ...	Joyram Deka (offg.) ...	183	152	
,, ...	,, ...	Barpeta ...	Básir Ali Biswás ...	275	191	
,, ...	,, ...	,, ...	Sib Nath Deka (offg.) ...	91	...	
,, ...	,, ...	Roha ...	Bhagirath ...	276	177	
,, ...	,, ...	,, ...	Sib Nath Deka (offg.) ...	90	38	
,, ...	Gauháti ...	Beltola ...	Nityánanda ...	179	84	
,, ...	,, ...	,, ...	Chandirám (offg.) ...	62	53	
,, ...	,, ...	,, ...	Nar Náth (offg.) ...	125	13	

District.	Subdivision.	Name of circle.	Name of supervisor kanungo.	Number of days in charge.	Number of days on tour.	Remarks.
Kámrúp ...	Gauháti ...	Paláshári ...	Kon Náth ...	274	183	
,, ...	,, ...	,, ...	Jagatrám (offg.) ...	92	18	
,, ...	,, ...	Boko ...	Rangdeb ...	366	200	
,, ...	,, ...	Pátidarrang ...	Nar Náth ...	121	62	
,, ...	,, ...	,, ...	Batirám (offg.) ...	245	187	
,, ...	,, ...	Hájo ...	Jiurám ...	261	130	
,, ...	,, ...	,, ...	Chinirám (offg.) ...	105	72	
,, ...	,, ...	Barkhetri ...	Molán Chandra ...	338*	188	* Exclusive of 28 days spent on demarcation of special estates.
,, ...	,, ...	Barigog ...	Titárám ...	250	154	
,, ...	,, ...	,, ...	Dhaneswar (offg.) ...	110	58	
,, ...	,, ...	Páuduri ...	Mantánrám ...	244	135	
,, ...	,, ...	,, ...	Lalitrám (offg.) ...	122	66	
,, ...	,, ...	Nalbári ...	Sántirám ...	260	176	
,, ...	,, ...	,, ...	Namal (offg.) ...	106	56	
,, ...	,, ...	Támbulpur† ...	Dhir Sing ...	137	77	† The circle was without a supervisor kanungo for 31 days.
,, ...	,, ...	,, ...	Jagatrám (offg.) ...	198	132	
,, ...	,, ...	Baramá ...	Mádhabrám ...	366	268	
Darrang ...	Mangaldai	Pathughát (Sipájhár).	Chandra Kánta Sarkár ...	235	94	
,, ...	,, ...	,, ...	Saruman Dás (offg.) ...	131	59	
,, ...	,, ...	Mangaldai ...	Kalámani Dás ...	366	252	
,, ...	,, ...	Kalágaon ...	Jajnarám Sahariya ...	304	119	
,, ...	,, ...	,, ...	Bápurám Dás (offg.) ...	62	29	
,, ...	,, ...	Benghári ...	Rámmal Dás ...	366	203	
,, ...	Tezpur ...	Western ...	Durgárám Datta ...	366	165	Durgárám was placed in charge of the Eastern Circle for 279 days, in consequence of the deputation of Gangaram, the supervisor kanungo of that circle, to extension survey work.
,, ...	,, ...	Eastern ...	Ditto ...	279		
,, ...	,, ...	,, ...	Nandi Náth Sarma (offg.) ...	87	73	
Nowgong...	Nowgong...	Town ...	Rabi Charan Dás ...	71	10	
,, ...	,, ...	,, ...	Uma Kánta Sarma (offg.) ...	295	143	
,, ...	,, ...	Silghát ...	Rámrath Datta ...	349	220‡	‡ Exclusive of 25 days spent at Tezpur in learning the use of theodolite.
,, ...	,, ...	Dobokà ...	Jairám Dás ...	174	94	
,, ...	,, ...	,, ...	Daupati Das (offg.) ...	192	130	
,, ...	,, ...	Roha ...	Sib Náth Sarma ...	366	203	
,, ...	,, ...	Dhing ...	Gobindarám Datta ...	366	199	
,, ...	,, ...	Gerná ...	Bhakatrám Datta ...	325	110	
,, ...	,, ...	,, ...	Gopál Chandra Goswámi (offg.)	41	28	
,, ...	,, ...	Ghugua ...	Lakemirám Das ...	366	224	
,, ...	,, ...	Mayang ...	Titárám Gagai ...	366	212	
Sibságar ...	Golághát ...	Northern ...	Manurám Talukdár ...	366	120	
,, ...	,, ...	Southern ...	Puarám Mahanta ...	351	218	
,, ...	,, ...	,, ...	Hara Nath (offg.) ...	15	4	
,, ...	Jorhát ...	Eastern ...	Bholárám Dutta (offg.) ...	366	172	
,, ...	,, ...	North-Western	Mahirám Das (senior) ...	354	192	
,, ...	,, ...	,, ...	Detharám Saika (offg.) ...	12	...	

District.	Subdivision.	Name of circle.	Name of supervisor kanungo.	Number of days in charge.	Number of days on tour.	Remarks.
Sibságar ...	Jorhát ...	South-Western	Katirám Dás ...	315	144	
,, ...	,, ...	,, ...	Kinarám Dás (offg.) ...	31	23	
,, ...	,, ...	,, ...	Mithirám Kákoti (offg.) ...	20	14	
,, ...	,, ...	Májuli ...	Mináram Dás ...	338*	202	* Exclusive of 28 days spent in Tezpur, in learning the use of theodolite.
,, ...	Sadr ...	Eastern ...	Sibrám Bora ...	366	252	
,, ...	,, ...	Central ...	Govinda Náth Rai ...	366	201	
,, ...	,, ...	Western ...	Lalitrám Chaudhuri ...	366	205	
Lakhimpur	Dibrugarh ...	Dibrugarh ...	Moheswar Dás ...	366	194	
,, ...	,, ...	Chábua ...	Lakshmi Kánta Dás ...	366	176	
,, ...	N. Lakhimpur	Lakhimpur ...	Jagannáth Duka ...	366	203	
Kámrúp ...	Gauháti ...	...	Samudra Náráyan Dás, Surveyor	366	112	
Lakhimpur	Dibrugarh	...	Muzaffar Ali ,,	366	102	

6. Three survey schools were open throughout the year, *viz.*, one at Gauháti, one at Dibrugarh, and one at Jorhát.

Survey schools.

The statement below gives details as to the number of pupils passed by each school during the year, and the average cost per pupil :

Year.	Number of men who received first-class certificates.				Number of men who received second-class certificates.				Total passed.	Total cost of the school.	Total receipts.	Net cost.	Average net cost of each passed pupil.
	Mauzadars.	Mandals.	Candidates.	Total.	Mauzadars.	Mandals.	Candidates.	Total.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
										Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1894-95 Gauháti ...	...	...	9	9	...	4	4*a*	8*b*(*c*)	61	1,039 1 11	903 8 6(*h*)	135 9 11	2 6 8
Jorhát ...	...	...	...	...	...	5	5	10(*d*)	9	505 12 6	153 9 0	367 12 6	40 13 10
Dibrugarh ...	...	...	...	...	...	5	9	14(*e*)	14	628 13 9	42 0 6	586 13 3	41 14 8
Total 1894-95 ...	...	...	9	9	...	13	62	75	84	2,223 12 2	1,083 8 0	1,140 4 2	13 9 2
1895-96 Gauháti ...	...	...	16	16(*f*)	...	3	51	54(*g*)	70	1,060 7 7	1,460 8 0(*i*)	58 15 7	0 12 1
Jorhat ...	...	...	...	...	...	7	17	24(*g*)	24	553 11 6	284 8 6(*j*)	279 3 6	11 10 7
Dibrugarh ...	...	...	...	...	...	5	6	11(*g*)	11	536 3 6	57 0 0(*k*)	479 3 6	43 10 5
Total 1895-96 ...	...	...	16	16	...	15	74	89	105	2,150 5 1	1,542 0 0	817 5 1	7 12 7

(*a*) Besides these, two outside candidates passed.
(*b*) Besides these, one outside mandal and one outside candidate passed.
(*c*) Besides these, two outside mandals and two outside candidates passed.
(*d*) Besides these, two outside candidates and one outside mandal passed.
(*e*) Besides these, three outside candidates passed.
(*f*) Besides these, one outside candidate passed.
(*g*) Ditto ditto.
(*h*) Inclusive of Rs. 43-8-0, being the sale proceeds of mandals' rules.
(*i*) ,, ,, ,, 56-0-0, ,, ,, ,, ,,
(*j*) ,, ,, ,, 14 8-0, ,, ,, ,, ,,
(*k*) ,, ,, ,, 5-0-0, ,, ,, ,, ,,

The Gauháti school did fairly well, showing increased receipts, diminished expenditure, and a larger number of pupils passed, as the results of the year's work. The net cost per passed pupil fell from Rs. 3-0-8 to 12 annas 1 pie only. The Jorhát Survey School also shows improved results, 24 men having passed from the school against 9 in 1894-95, while the net cost per passed pupil was Rs. 11-10-1, against Rs. 40-13-10. The usefulness of this school would be much increased, if more of the unpassed mandals of the Sibságar sadr and Golághát subdivisions were directed to attend it, and qualify for certificates. The results of the Dibrugarh Survey School are disappointing. Although there was a decrease of expenditure and a slight increase of receipts, the average net cost of each passed pupil rose from Rs. 41-14-8 in 1894-95 to Rs. 43-10-5 in 1895-96, owing to a smaller number of men having passed from the school. The district of Lakhimpur is very backward, and the Deputy Commissioner has great difficulty in obtaining candidates for the post of mandal, who are willing to attend the survey school. There are, however, as explained in the Report for 1894-95, good reasons for maintaining this school, in spite of its cost.

Two examinations for first-class survey certificates were held at Gauháti, by the Superintendent of Land Records, one in December 1895 and the other in May 1896. Twenty-one candidates from the school, and three candidates and three mandals not taught at the school, appeared in the two examinations; 16 candidates from the school, two outside candidates, and one outside mandal passed. No pupils of the Jorhát or Dibrugarh Survey Schools appeared at the examinations for first-class certificates, as

until recently, the first-class course was not taught in those schools. A class in that course has been opened in the Jorhát School from the 23rd January, and in the Dibrugarh School from the 1st April 1896.

Special Survey Examination for tahsildars.

Bábu Rudra Náth Barua, of Roha, Nowgong.
Bábu Bisturám Barua, of Jorhát, Sibságar.
Munshi Muhammad Eunas Ali, of Gauhati Kámrúp.
Babu Chiri Ram Das, of Barama, Kámrúp.
Bábu Chandra Kánta Barua, of Sámaguri Nowgong.
Bábu Dandadhar Barua, of Golághát, Sibságar.
Babu Ratna Kánta Barua, of Pátidarrang, Kámrúp.
Bábu Gara Prasád Kákati, of Athgaon, Sibságar.
Babu Durga Prasád Datta Barua, of Námtidal, Sibságar.
Babu Syám Lál Chaudhuri, of Palashári, Kámrúp.

7. The 16 tahsildars of the Brahmaputra Valley named in the margin, who were liable to examination in Practical Surveying under the provisions of Chapter V, Section IV, Rule 7 of the Manual of Executive Rules, were examined by the Superintendent of Land Records.* Bábus Rudra Náth Barua, Bisturám Barua, Chinirám Dás, Dandadhar Barua, Guru Prasád Kakati, Durga Prasád Datta Barua, and Syám Lál Chaudhuri succeeded in passing the required test, while the others, viz., Munshi Muhammad Eunás Ali, Bábus Chandra Kánta Barua, and Ratna Kanta Barua failed to qualify. This is the third time that Munshi Muhammad Eunás Ali has presented himself for examination. On the first occasion he failed, and on the second he had to retire from the examination owing to illness. As regards Bábu Chandra Kánta Barua, it may be noticed that in 1892-94 he was excused from appearing at the examination on the ground that he had not had sufficient time to prepare for it. In 1894-95 he appeared, but failed. Out of the 27 tahsildárs in the province (excluding three officiating tahsildárs), 20 have now passed in practical surveying, and three have been exempted.

The naib tahsildárs of the Kátigara tahsil in Cáchár, and the Jaintia sadr tahsil, Sylhet, were given a practical training with the survey party. The naib tahsildar of Káníárghát (Jaintia) was found too old to do field work; it is understood that he will soon retire. Two muharrirs of each of the Jaintia tahsil offices, one from the Silchár, one from the Kátigara, and two from the Háilákándi tahsil office were also sent to the Survey Camp for instruction.

The Government Surveyor and Assistant Government Surveyor of Silchár, and the Assistant Government Surveyor of Háilákándi, were deputed to the Survey Camp with a view to testing their fitness for appointment as supervisor kanungos when the time comes for organizing the Land Records staff in the Cáchár district. The necessity for the test is illustrated by the fact that, of the three officers, only the first mentioned was found to be at all qualified, by his knowledge of survey, for a supervisor kanungo's duties.

Qualified subordinate officials.

8. The following statement gives details as to the number of qualified mauzadars and mandals or patwaris in Government employ in the Assam Valley districts and in the cadastrally-surveyed portions of Sylhet and Cáchár at the close of the year under report, as compared with the figures of the preceding year; details as to the number of qualified candidates for employment are also given:

District.	Total number on 31st March 1896.		Number exempted on 31st March 1896.		Men with first-class certificates on 31st March.						Men with second-class certificates on 31st March.					
	Mauzadárs.	Mandals or patwaris.	Mauzadárs.	Mandals or patwaris.	Mauzadars.		Mandals or patwaris.		Candidates.		Mauzadars.		Mandals or patwaris.		Candidates.	
					1895.	1896.	1895.	1896.	1895.	1896.	1895.	1896.	1895.	1896.	1895.	1896.
Cáchar (Kátigora)	...	16	...	...	...	...	...	...	10	...	15	...	...	...	6	...	138
Sylhet (Pratábgarh)	...	4	...	...	...	...	1	3	...	3	...	...	...	3	1	...	...
,, (Jaintia)	...	32	...	...	...	...	11	30	...	1	...	...	...	26	1	...	...
Goálpára	8	35	6	...	...	...	1	10	...	...	...	...	1	15	19	...	18
Kámrúp	8	300	...	13	2	5	53	80	30	57	3	4	232	297	50	94
Darrang	13	132	...	5	1	2	17	19	1	1	4	5	104	104	30	31
Nowgong	20	167	...	...	4	6	23	29	2	1	2	2	123	110	40	12
Sibságar	22	204	3	...	2	...	51	44	3	3	18	17	104	109	8	18
Lakhimpur	34	107	...	...	4	6	3	3	1	1	2	5	60	62	28	23
Total	105	1,024	9	18	13	16	140	223	37	31	25	34	604	621	180	336

Men who worked as amins with the cadastral survey party have been classed with the holders of first-class survey school certificates, and those who have obtained preliminary certificates from the Superintendent of Survey with the holders of second-class survey school certificates.

On the 31st March 1896, 852 mandals and patwaris out of 1,024 had qualified in surveying, as against 804 out of 1,009 on the 31st March 1895. The number of mandals and patwaris with first class certificates or equivalent qualifications had increased from 140 to 228. The total number of mandals and patwaris without any survey certificate was 154 (excluding 18 exempted), against 183 (excluding 22 exempted) at the end of the previous year.

Grading of mandals.

9. The following statement shows the number and grading of mandals and pátwáris in each district as it stood on the 1st April 1896, and compares the figures with those of the previous year, and with the sanctioned scale :

Name of district.	Sanctioned scale.				Scale on the 1st April 1895.				Scale on the 1st April 1896.				Increase or decrease during the year.			
	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Cáchár (Kátigará)	3	5	8	16	...	...	...	...	...	...	16	16	...	...	+16	+16
Sylhet (Prátábgarh).	...	1	3	4	...	...	4	4	...	1	3	4	...	+ 1	— 1	...
„ (Jaintia)...	10	15	27	52	...	...	52	52	...	...	52	52	...	...	...	...
Goálpára ...	7	10	18	35	1	10	24	35	3	8	24	35	+ 2	— 2	...	...
Kámrúp ...	59	88	149	296*	25	105	165	295†	34	126	135	295‡	+ 9	+21	—30	...
Darrang ...	30	43	76	150	17	58	65	140	25	56	58	139	+ 8	— 2	— 7	— 1
Nowgong ...	34	51	85	170	14	36	116	166	26	45	96	167	+12	+ 9	—20	+ 1
Sibságar ...	40	62	104†	206†	22	48	134	204	28	72	104	204	+ 6	+24	—30	...
Lakhimpur ...	24	36	60	120	5	22	81	108	6	30	71	107	+ 1	+ 8	—10	— 1
Total ...	207	313	529	1,049	84	270	641	1,004	122	338	559	1,019	+38	+59	—82	+15

* Exclusive of the five mandals of Beltalá paid by the mauzádár. One additional mandal was entertained for the Bhábanipur mauza under the sanction conveyed in Secretary to the Chief Commissioner's letter No. 21 Survey—1213L., dated the 7th May 1895.
† The figures given in the report for 1894-95 were wrong.
‡ Exclusive of the five mandals of Beltala paid by the mauzádár.

The entertainment of a staff of 16 pátwáris in the Kátigara tahsil of the Cáchár district to keep up to date the maps and settlement records prepared by the professional survey party and the settlement staff working in connection with it, was sanctioned by letter No. 1 Survey —371R., dated the 5th February 1896, from the Secretary to the Chief Commissioner.

There has been a further considerable increase in the number of mandals in the first and second grades, owing to the promotion of qualified men in the lower grades to fill vacancies in the higher ones.

With a view to attracting a better class of men to take service as mandals, proposals were submitted to the Chief Commissioner by the permanent Director of Land Records in his letter No. 2681, dated the 28th May 1895, to the Secretary to the Chief Commissioner, for revising the sanctioned scale of mandals in the Assam Valley Districts, so as to increase the monthly rate of pay of the second and third grades from Rs. 9 and Rs. 6 to Rs. 10 and Rs. 8 respectively. These proposals have recently been sanctioned by the Government of India, and the Chief Commissioner has directed that the revised scale shall be brought into force with effect from the 1st June 1896. The revised scale comprises 188 mandals in the first, 284 in the second, and 480 in the third grade, as against 194 mandals in the first, 292 in the second, and 491 in the third grade sanctioned by the scale which it replaces, and involves an increase in the total cost of the sanctioned establishment of mandals of Rs. 12,408 per annum. The sanctioned rates of pay of mandals and patwaris in the Assam Valley, in the Cáchár district, and in pargana Prátabgarh of Sylhet district, are now Rs. 12 in the first, Rs. 10 in the second, and Rs. 8 in the third grade. In the Jaintia parganas of the Sylhet district, the sanctioned rates are Rs. 12 in the first, Rs. 9 in the second, and Rs. 8 in the third grade. Proposals will shortly be submitted for raising the rate of pay of pátwáris of the second grade in the Jaintia parganas to Rs. 10 a month, so as to make the rates of pay of mandals and pátwáris uniform throughout the province.

Relations of mandals with tahsildárs and mauzádárs.

10. In the Annual Land Revenue Administration Report of the Commissioner of the Assam Valley Districts for the year 1894-95, mention is made of a tendency on the part of mandals to consider themselves independent of tahsildárs and mauzádárs. There seems to be some foundation for the complaint that this tendency is encouraged by the rules for the maintenance of settlement maps and records, and proposals for amending the rules so as to remedy this defect have recently been sanctioned.

Agricultural Conference.

11. At the Agricultural Conference held in January 1896, the recommendations of the Agricultural Conference held at Simla in October 1893, were discussed, with special reference to the Resolutions of the Government of India in the Revenue and Agricultural Department No. 17-95-1, dated the 17th September 1895, on the subject of agricultural analysis, and No. 19-98-1, dated the 20th September 1895, on the education of the agricultural classes. The proposals for bringing the Registration and Land Records Departments into closer correspondence with each other, and under the same responsible head, referred to in the Resolution of the Government of India in the Revenue and Agricultural Department, No. 20-353-1, dated the 2nd October 1895, were also discussed. The conclusions arrived at on each of these subjects have been separately considered by the Chief Commissioner, and it is not necessary to recapitulate them in this report. The important recommendations of the Conference connected with the work of this department have been noticed below under the heads to which they relate.

Prescribed headings.

12. In the paragraphs below the headings prescribed by the Government of India in circular No. 54A, dated the 28th April 1884, have been separately taken up.

I.—ORGANISATION AND MAINTENANCE OF VILLAGE RECORDS.

Inspection by the Director of Land Records and Agriculture and the Superintendent of Land Records, Assam.

13. The statement below shows the number of mandal and supervisor kanungos whose papers were examined :

District.	Subdivision.	Total number of supervisor kanungos in cadastrally-surveyed areas.	Number of kanungos whose work inspected by		Total number of mandals in cadastrally surveyed areas.	Total number of mandals whose work inspected by		Remarks.
			Director of Land Records and Agriculture.	Superintendent of Land Records.		Director of Land Records and Agriculture.	Superintendent of Land Records.	
Kámrup	Barpeta ...	3	3	3(a)	60	60	60(b)	(a) Visited twice by the Superintendent of Land Records.
,, ...	Gauháti ...	11	11	11(a)	210	205	201(c)	(b) Of these, 57 were visited twice.
Darrang	Mangaldai ...	4	4	4(a)	80	76	78(d)	(c) Of these, 136 were visited twice.
,, ...	Tezpur ...	2	2	2	28	25	21	(d) Of these, 77 were visited twice.
Nowgong	Nowgong ...	8	8	8	156	125	145	(e) Inclusive of 6 mandals of Ahatguri.
Sibságar	Golághát ...	2	2	2	52(e)	52	52	(f) Exclusive of 6 mandals of Ahatguri.
,, ...	Jorhát ...	4	4	4	73(f)	71	70	
,, ...	Sadr ...	3	3	3	99	68	68	
Lakhimpur	Dibrugarh ...	2	2	2	26	24	26	
,, ...	North Lakhimpur ...	1	1	1	19	18	19	
Total	.....	40	40	40	773	725	740	

The Superintendent of Land Records inspected the work of all the 40 kánungos and of 740 supervisors out of 773 mandals employed in the cadastrally-surveyed area of the Brahmaputra Valley. Adding his inspections in that portion of the Brahmaputra Valley to those made by Mr. Gait and myself, the work of 18 kanungos and 320 mandals was inspected three times, that of the remaining 22 kanungos and 392 mandals twice, and that of 61 mandals once only. The Superintendent of Land Records also inspected the work of 7 mandals of the area surveyed in extension in Bijni during the season 1894-95. In the Surma Valley, Mr. Gait inspected the work of two of the pátwáris of Pratabgarh, the other two being absent, at the time of his visit to Karimganj, on deputation to the Cachar Survey Camp for practical training. When the permanent Director visited Jaintia in December 1895, the patwaris appointed there had been engaged chiefly on office work in connection with the re-settlement), but had done little or no survey work. Mr. Gait inspected their office work and made suggestions with regard to the preparation of the *dag chithas* and *jamabandis*. A brief account of the results of the inspections of village papers and maps in each of the cadastrally-surveyed districts of the Brahmaputra Valley is given below :

Kámrúp.—There are 14 supervisor kanungos and 270 mandals in the cadastrally-surveyed area of this district. Good progress had been made in the resurvey of villages where the cultivation is very fluctuating. In the sadr subdivision, the chief defect still is the paucity of fixed and demarcated points to aid the mandals in surveying, especially in the area surveyed before 1886, where theodolite stations were not demarcated permanently by the professional party. The kanungos have not exerted themselves sufficiently to supply this deficiency, the result being that the mandals still often resort to improper methods of survey, such as triangulation and measuring from corners of fields. The state of survey marks at theodolite stations in Barpeta shows improvement. There is also considerable improvement in the matter of testing on the ground the old cultivation traced from the previous year's maps, but some cases of neglect of this important work are still noticed.

Darrang.—There are, in the cadastrally surveyed area, 6 supervisor kanungos and 108 mandals. In the sadr subdivision the preparation of the papers for the supplementary settlement was found backward, not having been completed in either kanungo's circle by the 29th January. The condition of survey marks is far from satisfactory, and cases of surveying by triangulation and other forbidden methods are still common. There is some improvement in the testing of old cultivation. The mandals' calculations of area have not been sufficiently tested, and many mistakes have been found in them. In the Mangaldai subdivision, the condition of survey marks is generally good, but there is still a good deal of triangulation and of measuring from the corners of fields.

Nowgong.—There are 8 supervisor-kanungos and 156 mandals in the cadastrally-surveyed area of this district. The condition of the mounds and trees which mark theodolite stations gives cause for anxiety. The Chief Commissioner, during his cold-weather tour, personally noticed the neglected appearance of those passed by him on his way from Dhing to Nowgong. The survey method of the mandals has improved, and the registration of crops is better done. The practice of inking in old cultivation before testing it on the ground is, however, still common.

Sibsagar.—In this district there are, in the cadastrally-surveyed area, 9 supervisor kanungos and 194 mandals. The condition of survey marks is unsatisfactory especially in waste land grants and in the areas surveyed in extension. Forbidden methods of survey, such as triangulation, measurements with the twelve-foot pole instead of the chain, and measurements from corners of fields, are still common, although some improvement was noticed in the Jorhát subdivision. The testing of cultivation traced from the old maps is still much neglected. In the sadr subdivision, several cases of wholesale concealment of cultivation have recently come to light, indicating the necessity of thorough inspection of unsettled plots where concealed cultivation is likely to occur.

Lakhimpur.—Three supervisor-kanungos and 45 mandals are in charge of the cadastrally-surveyed area of this district. The work of the mandals in the sadr subdivision continues to improve, the papers of the supplementary settlement and crop statements having been filed with fair punctuality. The rate of progress is, however, still much slower than it should be, owing partly to the inferior class of men employed as mandals, and partly to the slackness of the kanungos. Owing to these causes, the survey methods of mandals are not satisfactory in either subdivision. The inspection and repairs of survey marks receive insufficient attention in the sadr subdivision, but in North Lakhimpur they appear to be fairly well looked after.

Inspections by Sub-Deputy Collectors.

14. The statement below shows briefly the work done by the Sub-Deputy Collectors in the matter of inspecting village records during the year under report:

District.	Subdivision.	Total number of patwaris or mandals.			Number of mandals or pátwáris whose		Remarks.
		In mauzas cadastrally surveyed.	In mauzas not cadastrally surveyed.	Total.	Papers examined and checked in cadastral and non-cadastral mauzas.	Maps checked in cadastral mauzas.	
Sylhet ...	Karimganj ...	4	...	4	4	4	
	Jaintia ...	52	...	52	17	14	
Goálpára ...	Dhubri ...	36*	8	44	25	25	* Employed on the extension survey at Bijni.
Kámrúp ...	Barpeta ...	60	11	71	56	49	
	Gauháti ...	210	20	230	216	71	
Darrang ...	Mangaldai ...	80	4	84	74	60	
	Tezpur ...	28	27	55	55	23	
Nowgong ...	Nowgong ...	156	11	167	162	113	
Sibságar ...	Golághát ...	52†	3	55	55	49	† Inclusive of 6 mandals of Ahatguri.
	Jorhát ...	73‡	5	78	50	42	(‡) Exclusive of 6 mandals of Ahatguri.
	Sadr ...	69	2	71	71	20	
Lakhimpur...	Dibrugarh ...	26	48	74	43	24	
	North Lakhimpur	19	14	33	29	18	
Total ...	.....	865	153	1,018	857	512	

The papers of all the mandals in the Karimganj, Tezpur, Golághát, and Sibságar sadr subdivisions were inspected during the year, and a fair amount of inspection was carried out in all other subdivisions. In Jaintia, as explained above, the pátwáris had hardly entered on their regular duties during the year, being chiefly engaged on office work in connection with the resettlement.

Inspections by Deputy Commissioners and Subdivisional Officers.

15. Brief details of the inspection work done by Deputy Commissioners and Subdivisional Officers are given in the following statements. Full particulars will be found in Appendix C:

Inspections by Deputy Commissioners.

Name of Deputy Commissioner.	District.	Supervisor kanungos.		Mauzals.				
				In cadastral area.			In non-cadastral area.	
		Total number.	Whose work inspected.	Total number.	Whose papers examined.	Whose maps checked.	Total number.	Whose work inspected.
Captain P. R. T. Gurdon ...	Goálpára ...	2	2	36	7	3	8	8
R. B. McCabe, Esq. ...	Kámrúp ...	14	...	270	32	3	31	4
Lieutenant-Colonel M. A. Gray.	Darrang ...	6	2	108	8	5	31	2
F. MacBlaine, Esq. ...	Nowgong ...	8	...	156	...	2	11	...
F. J. Monahan, Esq. ...	Sibságar ...	9	6	194	65	12	10	...
R. S. Greenshields, Esq. ...	Lakhimpur ...	3	...	45	...	...	62	...
	Total ...	42	10	809	112	25	153	14

Inspections by Subdivisional Officers.

Name of officer.	District.	Subdivision.	Supervisor kanungos.		Mauzals.				
					In cadastral area.			In non-cadastral area.	
			Total number.	Whose work inspected.	Total number.	Whose papers examined.	Whose maps checked.	Total number.	Whose work inspected.
Babu Madhab Chandra Bardalai ..	Kámrúp	Barpeta ..	3	3	60	4	12	11	1
D. H. Lees, Esq.	Darrang	Mangaldai ..	4	3	80	33	4	4	..
B. C. Allen, Esq.	Sibságar	Golághát ..	2	3*	52	51	10	3	..
W. A. M. Duncan, Esq.	,, ...	Jorhát	4	5†	73	25	3	5	1
R. C. Hamilton, Esq.	Lakhimpur	North Lakhimpur ..	1	..	19	..	..	14	..
		Total	14	14	284	142	29	37	2

* Including the supervisor kanungo of the Majuli circle, which is partly in Jorhát and partly in Golághát.
† Including the kanungo employed on demarcation of special estates in Jorhat.

Comparison of these statements with that given in paragraph 14 of the report for 1894-95 shows that there has been a great increase in the amount of inspection of kanungos and mandals' work done by district officers. In the district of Nowgong, however, the maps of two mandals only were checked by the Deputy Commissioner, and in Lakhimpur no inspection of kanungos' or mandals' work was done either by the Deputy Commissioner or by the Subdivisional Officer of North Lakhimpur. Mr. Barnes, Assistant Commissioner, stationed at Dibrugarh, inspected the work of one kanungo and the papers of nine mandals and checked the maps of four mandals in that district.

16. The following statement shows the testing carried out by the Director of Land Records and by the staff under his immediate control during the past two years :

Testing by the Director of Land Records and Agriculture and the staff under his immediate control.

	Number of check lines.		Number of fields.		Number of offsets.		Length of check lines in miles.		Remarks.
	1894-95.	1895-96.	1894-95.	1895-96.	1894-95.	1895-96.	1894-95.	1895-96.	
Director of Land Records	55	14	389	194	275	291	11·65	7·82	In extension survey area.
	24	7	294	120	315	180	9·40	4·40	In professionally-surveyed area.
Total	79	21	683	314	590	471	21·05	12·22	
Superintendent of Land Records ..	7	8	88	124	78	168	3·22	4·57	In extension survey area.
	75	64	669	788	1,119	1,687	33·09	34·35	In professionally-surveyed area.
Total	82	62	748	907	1,197	1,855	36·31	38·92	
B. C. Allen, Esq., on special duty with Director of Land Records.	15	..	160	..	73	..	5·36	..	In extension survey area.
	13	..	142	..	75	..	6·15	..	In professionally-surveyed area.
A. E. Harward, Esq., on special duty with Director of Land Records.	..	26	..	171	..	269	..	7·94	In professionally-surveyed area.
				101	..	121	..	3·67	In extension survey area.
Total	28	26	302	372	148	333	12·11	11·61	
Babu Raj Kumár Ray, temporary Sub-Deputy Collector.	21	6	287	14	229	17	12·46	2·18	In extension survey area.
	..	43	..	327	..	677	..	27·85	In professionally surveyed area.
,, Harendra Kumar Ghosh, temporary Sub-Deputy Collector.	19	20	327	294	358	452	11·63	10·44	In extension survey area.
	..	7	..	126	..	203	..	8·23	In professionally-surveyed area.
,, Rám Kumár Áditya, temporary Sub-Deputy Collector.	44	17	577	207	863	292	21·74	9·07	In professionally surveyed area.
	..	12	..	323	..	348	...	8·30	In extension survey area.
Grand total	248	220	2,865	2,933	3,893	4,977	115·52	120·34	

The temporary Sub-Deputy Collectors shown in this statement are those who were deputed for survey training under the Director of Land Records in the cold weather of 1894-95, and remained under his orders during the early months of the year under report. Mr. Harward, Assistant Commissioner, lately transferred to the province from Bengal, was deputed to the camp of the permanent Director for 33 days to give him an opportunity of becoming acquainted with the cadastral survey and land records system. He accompanied the Director in his tour in the Golághát and Jorhát subdivisions, and was deputed to inspect the work of the Land Records staff in the cadastrally-surveyed portion of the North Lakhimpur subdivision.

Testing by Sub-Deputy Collectors.

17. Full particulars of testing done by Sub-Deputy Collectors will be found in Appendix D. Check lines run independently and those run with other officers have been shown separately. The statement shows that the total length of check lines run by these officers during the year amounted to 650 linear miles, as against 330 miles in the previous year. Excluding lines run in surveying new waste land grants or testing the demarcation of grants and special tenures, the total length of check lines comes to 521 miles, or 201 miles more than in the previous year, which must be considered a satisfactory result.

Babu Rádhá Kánta Hándiqui, of Jorhát, ran the greatest length of check line, 84·30 miles, but of this, 52·19 miles were run in testing the demarcation of special estates. Next came Babu Rajani Kánta Bardalai, of Barpeta, who ran 82·52 miles, of which 20·02 miles were run in testing demarcation work. By far the greatest length of line run in testing mandals' survey was that accomplished by Munshi Mashiat Ulla of Dibrugarh, 70·11 miles. The length of check line run by the Sub-Deputy Collector in the sadr subdivision of the Sibságar district was much less than it should have been, but this is partly due to the fact that, in the latter part of the year much of the time of the Sub-Deputy Collector (Babu Raj Kumár Ray) was occupied with the survey of waste land grants.

The highest outturn of testing in unsurveyed areas, 226·25 acres was that of Munshi Mashiat Ulla, of Dibrugarh, while Maulvi Muhammad Sádir, of North Lakhimpur, discovered the largest amount of concealed cultivation (274 acres).

Testing by supervisor kanungos.

18. The testing done by supervisor kanungos is shown in detail in Appendix E. The greatest length of check lines (92·69 linear miles) was run by Básir Ali Biswás of the Barpeta circle, Kámrúp. Next to him comes Govindaram Datta of Dhing, Nowgong, who ran 89·27 miles. Kalámani Das of Mangaldai circle, Mangaldai, Sibnáth Sarma, of Roha, Nowgong, and Malan. chandra Bora of Barkhetri, Kámrúp, ran 86·71, 84·93, and 83·25 linear miles respectively. The rules require every kanungo to run not less than 4 linear miles of check line per square mile of fluctuating cultivation in his circle. The smallest proportionate length of check line run by any kanungo during the year was 5·35 miles per square mile of fluctuating cultivation. The largest area of fluctuating cultivation (8,568 acres) was in the circle of supervisor kanungo Govinda ram Datta (Dhing, Nowgong), where the check lines run amounted to 6·67 linear miles per square mile of fluctuating cultivation.

The total length of check lines run by supervisor kanungos during the year aggregated 2,058·40 miles, against 1,725 miles in 1894-95. In 1893-94, the total length of check lines run was 1,436 miles. These figures are an indication of the increased activity which has been aroused in these officers in recent years.

Testing by tahsildárs, mauzadárs, etc.

19. The testing work done by tahsildárs is shown in Appendix F, and that by mauzadars and tahsil muharrirs in Appendix G. Amongst tahsildárs, Babu Keshab Chandra Singh of Roha, Barpeta, ran the greatest length of check lines, *viz.*, 33 miles. Babus Rádha Náth Barua of Rangia and Bangachandra Chaudhuri of Bojáli come next with 20·71 and 17·04 miles respectively. They discovered some cases of incorrect classification, the only cases reported to have been brought to light by tahsildars during the year. As in the previous year, Babu Kali Ram Chaudhuri of Chhaygáon, measured up the largest area of unsurveyed land (1,109 acres). Babu Ganga Ram Das of Boko, discovered the largest amount of concealed cultivation (105·52 acres). The tahsildars of the Sámáguri and Roha tahsils of the Nowgong district did far too little testing of mandals' field work. There has been some improvement in the testing of field work by mauzádárs and tahsil muharrirs. Those of Barpeta did the largest amount of testing with check lines (32·77 miles); they also tested the largest area in non-cadastral tracts (3,688 acres). The mauzádárs and tahsil muharrirs of Mangaldai come next. The mauzádárs of the sadr subdivision of the Lakhimpur district are again conspicuous for having done no testing whatever during the year.

20. The net results of the testing carried out during the last two years by Deputy Commissioners and Subdivisional Officers are given in the following statement :

Testing by Deputy Commissioners and Subdivisional Officers.

District.	Subdivision.	Testing by check lines.						Testing without check lines.			
		Total area surveyed up to		Total area of fine-mutting cultivation.		Linear miles of check line run.		Total area surveyed in.		Area tested.	
		1894-95.*	1895-96.†	1894-95.	1895-96.	1894-95.	1895-96.	1894-95.	1895-96.	1894-95.	1895-96.
1	2	3	4	5	6	7	8	9	10	11	12
		Square miles.	Square miles.	Acres.	Acres.			Square miles.	Square miles.	Acres.	Acres.
Goálpára ..	Dhubri	..	55·64	2271	3,326	5·15‡	6·47	1,884·00	2,225·45	..	..
	Goálpára	..	..	..	..	..	..	1,570·00	1,570·00	..	..
Kámrúp ..	Barpeta	499·38	515·06	31,371	19,269·66	10·36	10·71	736·42	707·94	284	327
	Gauhátí	1,057·74§	1,429·48	35,254	28,024	..	2·95	1,029·70	987·06	..	..
Darrang ..	Mangaldai	677·12	677·12	8,107	8,947	..	9·72	668·43	668·43	..	..
	Tezpur	213·10	233·96	6,661	5,484	..	8·10	1,029·90	1,029·04	..	..
Nowgong ..	Nowgong	1,068·91	1,057·16	35,744	29,266	0·66	1·95	2,179·54	2,173·29	..	..
Sibsagar ..	Golaghat	334·20	341·21	5,155	6,227	..	10·62‖	580·20	573·19	..	..
	Jorhat	674·40	677·63	5,606	5,877	0·74	2·14¶	243·61	240·38	..	40
	Sibsagar Sadr ..	654·73	673·23	6,107	9,132·77	1·43	3·22	339·27	318·77	..	..
Lakhimpur ..	Dibrugarh	138·19	140·19	1,695	1,367·42	..	6·61(e)	2,27·81	2,272·81	..	512·94
	North Lakhimpur ..	89·06	89·06	2,278	1,271·73	2·07	..	1,089·94	1,089·94	..	..
	Total	5,776·63	6,354·26	169,253	118,243·79	22·41	62·69	15,025·42	14,857·13	284	839·94

* This excludes the area surveyed by local agency in different districts during the year 1894-95.

† Ditto ditto ditto ditto 1895-96.

‡ These figures relate to the area surveyed in extension in 1894-95.

§ Revised figures.

‖ Of these, 1·50 miles were run by the Deputy Commissioner, Sibsagar.

¶ Of these, 1·07 miles ditto ditto ditto.

(e) These represent the testing done by Mr. Barnes, Assistant Commissioner, Dibrugarh.

The total length of check lines run by district and subdivisional officers in 1895-96 was 55·69 linear miles, or a little less than double the length run in the previous year. The greatest length of check line (10·71 miles) was run by Babu Mádhab Chandra Bardalai, the Subdivisional Officer, Barpeta, and the next greatest by Mr. Allen, Subdivisional Officer, Golághát (9·12 miles); Babu Mádhab Chandra Bardalai also measured up 327 acres in unsurveyed tracts. Mr. Barnes, Assistant Commissioner, Dibrugarh, ran 6·61 miles of check lines and measured up 512·94 acres in the unsurveyed area. The only subdivision to which the cadastral survey has been extended, where no testing by check lines was done by the District or Subdivisional Officer, was North Lakhimpur. Figures showing the testing carried out by Deputy Commissioners and Subdivisional Officers during the past ten years are given in the margin.

Year.	Length of check lines, in miles.	Area tested without check lines, in acres.
		Acres.
1886-87	...	4,485
1887-88	...	2,954
1888-89	8·57	2,659
1889-90	1·84	3,539
1890-91	...	1,436
1891-92	7·29	390
1892-93	13·25	448
1893-94	12·77	527
1894-95	29·41	254
1895-96	55·69	840

Total testing done.

21. In the following statement, the total testing done in the cadastrally-surveyed area by means of check lines is compared with the total area of fluctuating cultivation :

District.	Subdivision.	Number of linear miles per square mile of fluctuating cultivation.					
		By Director of Land Records and the staff under his immediate control.	By Sub-Deputy Collectors.	By supervisor kanungos.	By tahsildars, mauzadars, etc.	By District and Subdivisional Officers.	Total
Sylhet ...	North Sylhet (Jaintia) ...	...	1·98	11·40	...	0·76*	14·14
Kámrúp ...	Barpeta	0·73	2·03	5·94	2·66	0·34	11·70
	Gauhátí	0·38	0·69	8·07	1·64	0·04	11·72
Darrang ...	Mangaldai	...	1·46	12·71	1·64	0·31	16·12
	Tezpur	...	4·63	10·66	0·80	0·26	16·35
Nowgong ...	Nowgong	...	0·52	9·60	0·49	0·04	10·65
Sibságar ...	Golághát	0·97	3·38	9·34	0·99	1·18	15·98
	Jorhát	0·27	2·50	9·44	0·82	0·13	13·16
	Sadr	...	1·51	9·20	2·42	0·24	13·37
Lakhimpur ...	Dibrugarh	...	10·95	16·31	...	2·12†	29·38
	North Lakhimpur ...	...	6·84	16·79	1·80	...	25·43

* This represents the testing done by Babu Chandra Kanta Sen, Extra Assistant Commissioner, Jaintia, Sylhet.
† Ditto ditto Mr. Barnes, Assistant Commissioner, Dibrugarh.

The above statement excludes lines run by subordinates in company with superior officers and also those run in the area surveyed during the year by local agency. As compared with the previous year, there was a satisfactory improvement in the proportion of length of check lines run to area of fluctuating cultivation in every subdivision.

Testing of office work.

22. The supervision and testing of mandals' office work by the supervisor kanungos is still far from sufficient, and mistakes are frequently found in the calculation of areas and preparation of settlement papers, which could hardly occur if the kanungos carried out the percentage of testing required by rule.

With a view to ensuring that an adequate amount of testing of mandals' office work shall be done by tahsildars, instructions were issued in November 1895 by the Commissioner to the Deputy Commissioners of the Assam Valley districts to call for weekly diaries from those officers during the time when the mandals are engaged in writing up the settlement papers for the regular settlement. From the reports received from Deputy Commissioners, it appears that no testing of mandals' office work was done by the tahsildars or mauzádárs in Nowgong or in the sadr subdivision of the Lakhimpur district. In other subdivisions some testing of this description by tahsildars and mauzádárs appears to have been insisted upon, but in the Barpeta subdivision only does the amount of testing done by them appear to have been adequate. This defect will no doubt be remedied, as regards tahsildars, by the Commissioner's orders referred to above.

Circles of supervisor kanungos and mandals.

23. The cadastral survey of 150 square miles, comprised in the Kátigara tahsil of the Cáchár district having been completed during the year, proposals were drawn up by the permanent Director, in consultation with the Deputy Commissioner and the Settlement Officer, Cachar, for the entertainment of a staff of kanungos and pátwáris to keep the survey maps and records up to date.* These proposals have been sanctioned by the Chief Commissioner,† and men have been selected for the different appointments. The scheme provides for the entertainment of two supervisor kanungos (who will be borne on the Provincial list) and 16 pátwáris, namely, 3 in the first, 5 in the second, and 8 in the third grade. The rates of pay of the pátwáris are the same as those recently sanctioned for mandals in the Assam Valley, namely, Rs. 12 a month for the first, Rs. 10 for the second, and Rs. 8 for the third grade. The survey qualifications of the pátwáris appointed have been shown in paragraph 8 above. They have all been placed in the first instance in the third grade and those whose work gives satisfaction will be promoted gradually to the higher grades.

* Letter No. 66, dated the 4th January 1896, to the Secretary to the Chief Commissioner.

† Letter No. 1Survey—371R., dated the 5th February 1896, from the Secretary to the Chief Commissioner.

The average areas of supervisor kanungos' and of mandals' or pátwáris' circles in the Assam Valley, in Jaintia, and in the Kátigara tahsil are shown below. It will be seen that the circles of the two kanungos of Kátigara tahsil are small. It will probably be possible later on to add to one of these circles a portion of the sadr tahsil, or to place the whole of the Kátigora tahsil in charge of one kanungo; but on the first introduction of the new system of land records, the tahsil would be too large a charge for one man. The average settled area in the circles of mandals in the Assam Valley is much less than in pátwáris' circles in Jaintia and Cáchár; but, owing to the amount of fluctuating cultivation, much more survey work is required in mandals' circles than will have to be done by pátwáris in the Surma Valley:

Class of officer.	Settled area, in *bighas*.						Unsettled waste, in *bighas*.			Total in *bighas*.		
	Ordinary tenure.			Grants, permanently settled, *lákhiráj* or *aláphdáruj* estates.								
	Assam Valley.	Jaintia (Sylhet).	Kátigara tahsil (Cachar).	Assam Valley.	Jaintia (Sylhet).	Kátigara tahsil (Cachar).	Assam Valley.	Jaintia (Sylhet).	Kátigara tahsil (Cachar).	Assam Valley.	Jaintia (Sylhet).	Kátigara tahsil (Cachar).
Mandals or patwaris	5,311	11,763	12,320	1,877	1,000	3,680	7,387	5,973	2,094	14,575	18,026	17,974
Supervisor kanungos	100,497	122,739	98,869	23,487	13,000	28,480	139,973	68,649	16,753	275,957	234,388	143,702

Except the addition of two new circles in Cáchár, no alteration of importance was made in the circles of supervisor kanungos during the year.

Condition of survey marks.

24. The condition of survey marks as reported by the district authorities is shown in the statement, Appendix H. An abstract is given below:

—	Classification.	Total number (4+7+8).	Total number found in good order by mandals or patwaris.	Total number found not in good order by mandals or patwaris.		Total of columns 4 and 5, or 4 and 7, in 1904-05.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
Total for the province.	(*a*) Trijunction prisms	10,713	9,702	718	80	10,420	213
	(*b*) Theodolite stations shown by mounds and *simul* boughs.	68,675	25,663	31,645	8,031	57,308	3,336
	(*c*) Kanungos' mounds, including jungle mounds.	5,480	2,521	2,542	324	5,063	93
	(*d*) Prisms on boundaries of grants, etc.	3,764	3,681	54	3	3,735	26
	(*e*) Concrete blocks on boundaries of grants, etc.	3,256	2,022	1,057	177	3,079	...
	(*f*) Country stones on boundaries of grants, etc.	8,193	8,174	7	9	8,181	3
	(*g*) Mounds on boundaries of grants, etc.	6,121	5,799	239	81	6,038	2
	Grand total ...	106,202	57,562	36,262	8,705	93,824	3,673

The statement is more complete than that furnished in previous years, as it shows the condition of marks erected on the boundaries of waste land grants and revenue-free and *nisf-khiraj* estates which have been cadastrally surveyed. The demarcation of the boundaries of those estates is being carried out under the supervision of the Director of Land Records, and its progress will be reported in the annual report on survey and settlement operations. Instructions have been issued to show the boundary marks of these estates on the cadastral maps and on the trace maps on the scale of 2 inches to the mile on which other survey marks are shown. In some districts sufficient attention has not been paid by supervisor kanungos to the erection of mounds as fixed points where required, to aid the mandals in their survey, and to the entry of such mounds on the two inches to the mile traces. The attention of the Deputy Commissioners has, therefore, been drawn to the instructions on the subject. To guard against the danger of inaccuracy which might arise in testing the marks indicating mounds on the cadastral maps from year to year, kanungos have been directed to copy, in the margin of the maps, the field books from which such marks have been plotted, and to replot the marks each year on the new maps from the field books. The condition of the theodolite station marks seen during the year by the Superintendent of Land Records and by Sub-Deputy Collectors, as well as by Mr. Gait and myself, is shown below :

District or subdivision.	Inspected by Director of Land Records and Agriculture.			Inspected by the Superintendent of Land Records.			Inspected by Sub-Deputy Collectors.			Total number inspected.		
	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.
Kariuganj	..	..	..	..	..	..	2,417	1,791	74·10*	2,417	1,791	74·10
Dhubri	..	..	..	..	..	..	43	42	97·67†	43	42	97·67
Barpeta	46	35	87·00	348	242	77·25	632 206	349 203	72·40* 100·00†	1,068	829	77·62
Gauhati	28	11	39·28	441	302	68·45	184 118	150 98	81·52* 83·05†	771	561	72·76
Mangaldai	38	35	92·10	192	124	86·83	703 88	661 86	94·87* 97·73†	1,021	972	95·20
Tezpur	13	10	76·92	72	61	83·56	354	283	84·73*	439	354	84·29
Nowgong	71	64	90·14	320	272	78·75	901 104	701 70	87·79* 67·31†	1,396	1,177	84·31
Golaghát	124	118	76·62	45	42	95·55	453 81	330 47	75·59* 58·02†	742	538	75·10
Jorhát	282	215	83·73	66	56	84·84	815 14	681 10	84·78* 71·42†	1,178	992	84·21
Sibságar Sadr	70	51	72·85	23	15	65·21	493 115	414 90	83·97* 78·26†	701	570	81·31
Dibrugarh	..	..	..	..	..	..	676 17	672 17	76·33* 100·00†	693	689	76·98
North Lakhimpur	..	..	..	..	..	..	764 13	518 13	67·80* 100·00†	777	531	68·34
Total	695	552	80·31	1,563	1,135	76·84	8,220	7,523	79·65	11,630	9,065	79·32

* In cadastrally-surveyed area. † In extension survey area.

Eleven thousand four hundred and thirty stations were visited during the year, against 8,185 in 1894-95 and 9,066, or 79·32 per cent., were found to be marked by growing or by newly-planted boughs, against 6,762 or 82·61 per cent. in the previous year.

Advances and recoveries on account of demarcation work in connection with cadastral survey operations.

25. The Statement I in the Appendix shows the advances and recoveries made up to the 31st March 1896, and the balance recoverable on the last day of the year, on account of demarcation work in connection with cadastral survey operations in each district. These advances have been grouped under the same heads as in the report for the previous year.

The balance outstanding in Kámrúp on the 31st March 1896 under head (1) Demarcation of village trijunction points and theodolite stations in the areas surveyed by the professional party" has since been all realised. In Lakhimpur, also, there is now no balance to be recovered. Of the other districts of the Assam Valley where recoveries are being made under this head, Nowgong shows the largest amount (Rs. 2,872-9-9) outstanding on 31st March 1896. Of this amount, however, Rs. 2,068-2-0 had been recovered by the end of April 1896. The prisms required for the demarcation of village trijunction points in the areas surveyed by local agency in the Assam Valley up to the end of the year 1893-94, were procured during the year and good progress made in the work of demarcation in most districts. The cost of these prisms will be recovered when the demarcation is finished in each district. Steps have now been taken to procure the prisms required for the demarcation of trijunction points in the areas surveyed in extension in 1894-95. The sum of Rs. 127-8-0 shown against Goálpára district, represents expenditure incurred on the demarcation of the theodolite stations of the survey of Dhubri town referred to in the next paragraph; steps will be taken to recover this amount when the resettlement of the town has been completed.

Extension survey.

26. A separate report, dealing in detail with the results of the extension of cadastral survey carried out by local agency in the Assam Valley, during the season 1894-95, was submitted with this office letter No. 1079, dated the 27th February 1896. The area originally taken up for survey during the season was 211 square miles, but, owing to the calls made on the time of Sub-Deputy Collectors and supervisor kanungos by the demarcation of special estates and by other work, the full programme could not be worked up to. The survey of 178·23 square miles only was completed, with the result of an increase in area of 6,300 *bighás* or 6·79 per cent. and in revenue of Rs. 6,071, or 10·33 per cent. The cost of the year's operations was Rs. 2,559 only. Besides the above area, the town of Dhubri was surveyed cadastrally by local agency with a view to its resettlement. The area taken up for extension survey in the season 1895-96 is about 226 square miles, but figures showing the results of the survey are not yet available. The total area actually surveyed by local agency up to the close of the season 1894-95 amounts to 734 square miles. The survey of this area has resulted in an increase in revenue of Rs. 18,436, obtained at a cost of Rs. 13,607 only.

Registrar kanungos.

27. All the registrar kanungos' offices, except that at North Lakhimpur, were inspected by Mr. Gait or myself. These offices were found, as a rule, in good order. The work of correcting the copy of the periodic *jamabandi* kept by the registrar kanungo, in accordance with orders passed in mutation cases, is generally up to date, but in many offices there is a want of clearness and uniformity in the method of carrying out corrections. A circular containing instructions on this subject is being issued to Deputy Commissioners. In subdivisions where mutation work is heavy, such as Gauháti, Jorhát, and Sibságar Sadr, the work of communicating to tahsildárs and mauzádárs the corrections to be carried out in their copy of the periodic *jamábandi* was found to be seriously in arrears. A form of *parwána*, which, it is hoped, will relieve registrar kanungos of much of the labour involved in communicating such orders, is under consideration. The issue of notices under section 58 of the Land and Revenue Regulation, in accordance with the Chief Commissioner's Circular No. 9R., dated the 6th March 1895, has had a marked effect, especially in the Mangaldai subdivision and in the three subdivisions of the Sibságar district, where there has been a considerable increase in the number of applications for registration. In order further to ensure the keeping up to date of the record of rights, in accordance with the policy laid down in the Resolution of the Government of India in the Department of Revenue and Agriculture, No. 20—353-1, dated the 2nd October 1895, the attention of District Judges has been drawn by the Chief Commissioner's Circular No. 17R., dated the 21st April 1896, to rule 12 of the Rules under Chapter IV of the Land and Revenue Regulation, by which Civil Courts are empowered to order the registration in the Deputy Commissioner's General Registers of transfers of estates decreed by them.

Correction of *dág chithas*.

28. The manner in which corrections necessitated by orders in mutation cases are made by the kanungos in the mandals' *dág chithas* still leaves much to be desired in certain districts, and numerous cases have been found in which grave discrepancies between the *dág chithas* and *jamábandis* have resulted from neglect in making such corrections. These cases have been brought prominently to the notice of the Deputy Commissioners of districts in which they have occurred.

II.—ANALYSIS OF DISTRICTS WITH REFERENCE TO SECURITY AGAINST FAMINE.

Agricultural defects.

29. As stated in previous Annual Reports of this Department, there is probably no tract in Assam which should be classed as insecure. At the same time, as was pointed out in paragraph 11 of the Resolution of the Government of India in the Revenue and Agricultural Department, No. 6—340-50G., dated the 8th December 1881, this assertion cannot be made with confidence with regard to the province as a whole, until a detailed investigation of the condition of every part of it has been made, and a system established under which a thorough knowledge of the circumstances of every village may be continuously maintained from year to year. The recommendations of the Provincial Agricultural Conference held in January last, following the recommendations of the Simla Agricultural Conference of 1893, and the suggestions contained in the Government of India's Resolution No. 17—95-1, dated the 17th September 1895, aim at supplying these requirements by the appointment of an agricultural expert, one of whose duties it will be to enquire into agricultural defects of a persistent character, and by the introduction of a circle book in which a continuous record of the changes in the circumstances of every village will be maintained. These recommendations have been accepted by the Chief Commissioner, and a form of circle book will be submitted to him for approval, after the Deputy Commissioners of districts in which a system of maintaining the settlement records is in operation have been consulted.

Further damage was done during the year in the Nalbári tahsil of the Kámrúp district by changes in the course of the Pagla Dia river which have rendered unculturable a large area of *rupit* land by covering it with a deep deposit of sand. Sufficient relief appears to have been afforded to the settlement-holders of these lands by reducing their assessment temporarily to *faringati* rates until they shall again become fit for the cultivation of *sáli* rice. A considerable area in the Mangaldai subdivision was thrown out of cultivation by the bursting of the embankment of the Nanai river. In the Chaukhát máuzá of the Sibságar district, the cultivators have suffered from the loss of crops through inundations in two successive years. No suspension or remission of revenue appears, however, to have been necessary so far. The damage caused by floods in parts of Sibságar during the past two years have made the raiyats eager to take up land which has been protected from inundation by the repair of old embankments.

It was decided at the Agricultural Conference that a rule requiring mandals and pátwáris to report injury done by unforeseen calamities, such as floods, blights, and hail storms, when they occur, would be desirable.

III.—SYSTEM OF COLLECTION OF REVENUE AND RENTAL IN PRECARIOUS TRACTS.

[*Nil.*]

IV.—MEASURES OF PROTECTION.

Embankments.

30. During the year the repair of the Dihing *bund* in Sibságar was completed, and the Dhaí Ali *bund* in the same district was partly repaired. Under former rulers, the rivers of this district were controlled by a great system of embankments, which were subsequently allowed to fall into disrepair. The renewal of some of the most important of these at the cost of provincial funds was begun in 1892-93, and has already had a valuable effect in protecting cultivation where it was precarious before, and in bringing under the plough tracts formerly unculturable owing to constant flooding.

V.—AGRICULTURAL EXPERIMENTS.

Crop experiments.

31. The annual note on crop experiments is submitted separately every year.

Boro dhán experiments.

32. Some seed of the variety of rice known as *boro dhán* in the Surma Valley and in Bengal, which is grown in the cold weather on low-lying moist land, on the edges of rivers and *bils*, was distributed to Deputy Commissioners of districts in the Brahmaputra Valley, with a view to its experimental cultivation, and instructions as to the method of cultivation were also circulated to them. The experiment has proved a failure in all districts, owing partly

to the season having been unusually dry, and partly to want of care in carrying out the instructions. There seems, however, to be no reason why this kind of rice should not be successfully cultivated in the Brahmaputra Valley, and arrangements will be made for repeating the experiment in selected districts next cold weather.

Fruit trees.

33. The small Government plantation of Malta oranges, lemons and citrons, near Theriaghát was properly looked after during the year. Out of the total number of trees, 30 citron and 10 lemon trees bore fruit. The fruits were sold on the spot by auction, and the sale proceeds, annas 14, credited into the treasury. Towards the close of the year, the plantation was cleared of jungle and fenced at a cost of Rs. 9.

An experiment in the cultivation of fruit trees at Gunjong in the North Cáchár subdivision was started during the year. The trees selected as most likely to suit the climate and soil of the place were apricots, peaches, nectarines, plums, loquats, apples and grapes. Six trees of each of these kinds were procured from the Assistant Conservator of Forests, Nainital, and planted in December 1895. The Subdivisional Officer, North Cáchár, reports that the loquats are doing best, the six trees planted being all strong and healthy. One peach tree and one apricot tree have died; the remaining peach and apricot trees are in fair condition. Four of the nectarine trees and five apple trees promise well, the condition of the remaining apple trees and two nectarine trees being indifferent. Of the six plum trees planted, only two are alive, and the grapes have failed altogether. On the whole, except as regards the plums and grapes, the experiment promises well so far.

The Chief Commissioner having suggested that an experiment should be made in growing fruit trees at Kohima as part of a scheme for the general improvement of the place, enquiries are being made as to the kinds of trees most suitable for planting there. The trees selected will be planted next cold weather.

Supply of silk cocoons to other countries.

34. The attempts made to procure *deo muga* cocoons for Mr. John Ruston, of Worksop, Nottinghamshire, England, have so far not met with success. Efforts are still being made to obtain for him some cocoons of this rare species. Fifty cocoons of the species *Cricula trifenestrata*, 100 *eri* (*Attacus ricini*), and 100 *muga* (*Antheræa assamœa*) cocoons were sent to Mr. Ruston by the Deputy Commissioner of Lakhimpur on the 20th November 1895.

An application from the Director of Land Records and Agriculture, North-Western Provinces and Oudh, for 100 *eri* cocoons, and one from the Director of Land Records and Agriculture, Bengal, for the supply of 200 *eri* cocoons to the Deputy Commissioner, Darjeeling, were also complied with.

Indigo.

35. At the request of the Director of Land Records and Agriculture, North-Western Provinces and Oudh, 85 cuttings of the *rum* plant were sent to him from Jorhát for experimental purposes.

VI.—CATTLE.

Cattle disease.

36. The subjoined statement shows the number of deaths among cattle during the past two years, as reported from the several districts of the province:

1	2		3		4		5		6		7		8		9		10	
District.	Rinderpest.		Foot-and mouth disease.		Swelling of mouth and throat.		Diarrhœa, dysentery, and cholera.		Anthrax.		Catarrh.		Other diseases.		Total.		Estimated value of cattle.	
	1894-95.	1895-96.	1894-95.	1895-96.	1894-95.	1895-96.	1894-95.	1895-96.	1894-95.	1895-96.	1894-95.	1895-96.	1894-95.	1895-96.	1894-95.	1895-96.	1894-95.	1895-96.
																	Rs.	Rs.
Cachar	13	24	1	267	260	405	1,120*	573	60	46	3	..	8	71	1,505	1,446	39,726†	39,244†
Sylhet	3,918	4,329	2,805	1,579	2,91	4,941	4,333	4,479	377	279	240	281	3,979	12,757	14,661	28,506	2,16,993	3,70,615
Lushai	78	1,274	1,679	1,639	2,169	2,911	1,640	2,48	60	59	1,329	1,063	14,568	14,199	22,407	22,454	1,41,145	1,97,2
Kamrup	8,726	2,710	16,411	11,476	..	2,757	15,200	10,726	..	..	..	..	12,8633	6,941	53,718	34,902	3,61,200	2,25,0
Darrang	..	632	305	1,268	71	237	312	1,0	..	105	..	101	2,980	2,387	7,3691	6,333	75,0001	58,0
Nowgong	..	921	..	7,285	..	1,027	10,078	3,414	..	..	..	..	3,536	3,720	12,1056	16,116	99,5627	12,7
Sibsagar	114	41	1,533	818	901	715	9,243	1,503	273	01	17	204	4,2033	6,146	17,0139	10,172	2,73,014	1,26,1
Lakhimpur	..	110	..	972	..	136	727	47	..	314	..	..	4,088	5,536	6,225	6,983	97,359	69,8
Naga Hills	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Khasi and Jaintia Hills	150	..	16	..	..	..	..	..	..	..	..	..	..	..	166	..	1,575‡	..
Garo Hills ..	220	..	..	..	..	..	..	..	..	..	..	..	..	..	220	..	2,860	..
Total	14,023	10,330	23,3?4	25,318	6,394	3,165	43,828	24,994	740	1888	1,649	1,763	49,956	51,922	1,65,732	126,926	12,,3,217	11,19,97

* Inclusive of 4,139 deaths, which the village officers were not able to classify.
† The Deputy Commissioner is unable to furnish statistics.
‡ Statistics were not collected during the year.
§ The Deputy Commissioner reports that there was no outbreak of cattle disease in Garo Hills during 1895-96.

The total number of deaths reported was considerably less than in the preceding year. There was a notable decrease of mortality in the districts of Kámrúp and Sibságar, while it increased seriously in Nowgong and Sylhet. With a view to the more accurate classification of diseases in the district returns, a circular giving the vernacular names under which the principal diseases are known was issued to district officers, but it does not appear as yet to have had the desired effect. It is probable that a large proportion of the deaths attributed to foot-and-mouth disease are really due to other causes. It is also likely that the deaths shown as due to "swelling of the mouth and throat" are cases of gloss anthrax, but this has not been definitely settled. Printed instructions in English and in the vernacular on the treatment of foot-and-mouth disease were circulated during the year. At the Agricultural Conference held in January, the appointment of a veterinary officer, to be attached to this Department, was recommended. This proposal has been endorsed by the Chief Commissioner in his Secretary's letter No. 185Agri.—2099R., dated the 4th June 1896, to the Secretary to the Government of India in the Revenue and Agricultural Department.

Breeding bulls.

37. As in the previous year, one of the two Government Kenwári bulls was stationed at Sibságar and the other at Gunjong in North Cáchár. The details as to the cost of keep and work done by the bulls are given in the statement below :

District.	Wages of keeper.	Cost of food.	Miscellaneous.	Total.	Number of successful coverings during 1895-96.			Total for 1894-95.
					Male.	Female.	Total.	
	Rs. a. p.	Rs. a. p.		Rs. a. p.				
Cachar ...	24 0 0	52 0 0	...	76 0 0	6	10	16	13
Sibságar ...	88 0 0	89 13 0	...	177 13 0	...	...	...	...
Total ...	112 0 0	141 13 0	...	253 13 0	6	10	16	13

The reasons for these unsatisfactory results were stated in the report of this Department for 1894-95. The bull which was stationed at Sibságar has now been transferred to Mangaldai, where it is expected to be more useful. The four Kenwári bulls formerly owned by private individuals in the Mangaldai subdivision are reported to be all dead. It would seem that bulls of this breed are not very well suited to the province.

The Chief Commissioner has sanctioned the purchase of seven additional bulls for breeding purposes, and arrangements are being made to procure five bulls of different breeds from the North-Western Provinces and two from Burma. Of these bulls it is proposed to station one at Shillong, one at Silchár, two in North Cáchár, two in the Jaintia parganas of the Sylhet district, and one in the Golághát subdivision of the Sibságar district.

At the suggestion of Sir Edward Buck, enquiries have been instituted as to the feasibility of starting a dairy farm near Shillong. A communication has been received from Mr. Keventer, the dairy expert, under whose management the dairy farm at Aligarh has attained such success, indicating generally the terms on which he would be prepared to undertake the management of a similar farm in Assam. The question of a suitable site for the farm is now being considered.

VII.—AGRICULTURAL AND FISCAL STATISTICS.

Agricultural and fiscal statistics.

38. These were compiled as usual in this Department, and submitted separately in Return No. 41B, on the 6th September 1895.

VIII.—TRADE AND TRADE STATISTICS.

Trade and trade statistics.

39. The quarterly and annual reports on the river-borne trade of the province were issued as usual, and a note on foreign trade was drawn up for incorporation in the Annual Provincial Administration Report.

The Dhubri traffic registration office was twice inspected, once by Mr. Gait and once by Rai Sarat Chandra Bánárji Báhádur, Officiating Director of Land Records, by whom the Bhairab Bázár office was also inspected once. The site which had been selected for the new office at the latter place was given up on a representation made by the India General and Rivers Steam Navigation Companies, by which it is required, and arrangements are now being made to build the office on another equally suitable site close by.

IX.—MISCELLANEOUS.

Miscellaneous.

40. The following subjects are noticed in this report, in accordance with the order of the Government of India or the Local Government, issued from time to time.

Fuel and fodder reserves.

41. In most parts of the province the population is so sparse, and the area of unoccupied waste land covered with jungle so great, that there is no need of fuel and fodder reserves. There are, however, places where, owing to the rapid extension of cultivation, the raiyats are in danger of being put to inconvenience for want of grazing grounds within a convenient distance of their homes. In the Annual Report of this Department for 1893-94, the question was raised whether it would not be desirable, in specified areas, where the population is unusually dense, to mark off portions of the waste still remaining unoccupied, and reserve them as public grazing grounds. Further enquiries have been made since then, the result of which appears to indicate the necessity of allotting village grazing grounds in certain localities under section 13 of the Assam Land and Revenue Regulation, and I have recently submitted to the Chief Commissioner a set of draft rules for the allotment of grazing grounds under that section.

Bones as manure.

42. As stated in previous reports, bones are never used in Assam as manure, except (rarely) by tea planters, and there is no export or import worth mentioning of this commodity.

Locusts.

43. No appearance of locusts was reported during the year.

Insect pests.

44. Dr. George Watt, Reporter on Economic Products to the Government of India was engaged during a tour of 2½ months in the Assam Valley, commencing at Sibságar on the 18th March 1895, in investigating the value of the *Adhatoda vasica* plant as an insecticide on tea gardens, and in studying the subject of tea blights generally. The report which is to embody the result of his enquiries has not yet been issued. The prize competition for the best essay on tea blights has been postponed till the termination of Dr. Watt's enquiries, which, it is understood, he proposes to complete by a visit to the tea gardens of Bengal and Cáchár.

State patronage of Muhammadans.

45. The only Muhammadan in superior service working under this department is a probationer for the appointment of Sub-Deputy Collector appointed in November 1895.

Rainfall registration.

46. There was no change in the system of rainfall registration during the year. The usual weekly and monthly returns were published in the gazette, printed copies of both being forwarded to the Meteorological Reporter to the Government of India. The total number of rainfall stations remained the same as at the close of the preceding year, *viz.*, 101. Of these, 47 were under Government management and 54 were maintained by tea planters Appendix J gives details as to the number of stations in each district, and the instruments with which they are provided.

47. The following statement shows the number of rain-gauges that were inspected during the year :

Inspection of rain-gauges.

District.	Total number of rain-gauges.	Number of inspections.						Number of gauges inspected more than once.	Number of different gauges inspected.	Number of gauges not inspected.
		By Deputy Commissioners and Subdivisional Officers.	By Civil Surgeons.	By District Superintendents of Police.	By Forest Conservators of Forests.	By Sub-Deputy Collectors &c.	Total.			
Cáchár	11	1	...	...	...	...	1	...	1	10
Sylhet	12	3	1	2	...	1	7	3	4	8
Goálpára	6	2	...	...	1	...	3	...	3	3
Kamrúp	16	1	...	...	...	...	1	...	1	15
Darrang	13	1	...	...	...	...	1	...	1	12
Nowgong	7	2	1	...	...	...	3	1	2	5
Sibságar	11	6	...	2	...	...	8	1	7	4
Lakhimpur	12	...	...	1	...	...	1	...	1	11
Nága Hills	5	2	...	...	...	...	2	...	2	3
Khási and Jaintia Hills	4	5	3	...	...	...	8	2	2	2
Gáro Hills	1	...	...	...	...	...	...	...	...	1
Manipur	1	...	...	...	...	...	...	...	...	1
North Lushai	2	1	...	...	...	...	1	...	1	1
Total	101	24	5	5	1	1	36	7	25	76

Less than one-fourth of the total number of rain-gauge stations were inspected during the year. The special attention of Deputy Commissioners has been drawn to the Chief Commissioner's Circular No. 7R., dated the 14th February 1896, which empowers them to entrust the duty of inspecting rain-gauges to Assistant Commissioners, Extra Assistant Commissioners, and Sub-Deputy Collectors. It is hoped that a considerable increase in the number of rain-gauges inspected annually will result from these orders.

Collection of economic products.

48. The collection of dye-stuffs, which was taken in hand during 1894-95, was completed during the year under report, and the materials collected were forwarded to the Reporter on Economic Products to the Government of India. In addition to the above, a sample of lac reared on the *arhar* plant (*Cajanus indicus*) and a note on the subject of the propagation of the lac-insect on that plant were supplied to that officer. Botanical samples and specimens of prepared fibre of rhea, grown in Assam, were also supplied to him. Two notes were drawn up by Rai Sarat Chandra Bánárji, Báhádur, Settlement Officer of Cáchár,—one on the different varieties of bamboos found in Cáchár and the other on the cultivation of *murta* (*Phrynium dichotomum*), from which *sitalpáti* mats are made. These notes were also forwarded to the Reporter on Economic Products. A requisition from him for samples of some 40 articles required for the Index Collection of the Imperial Institute, London, was received in January 1896, and the collection of the samples put in hand. They are being forwarded to the Reporter as collected. A duplicate of the collection of the Assam brass and copper wares made in 1894-95, and mentioned in last year's report, is now being made for deposit in the Indian Museum, the original collection having been intended for the Imperial Institute, London.

49. The following statement gives details as to the expenditure incurred by this Department during the year, as compared with those of the previous year:

Expenditure.

Year.	Superintendence, &c.	Settlement Officer.	Survey schools.	Kanungo establishment.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1894-95	43,202 4 1	59,188 13 0	2,223 12 2	1,18,514 6 8	2,23,129 [illegible] 11
1895-96	43,499 13* 9*	46,293 3 8†	2,159 5 1	1,25,496 7 8‡	2,17,448 14 2

* This includes—

	Rs. a. p.
(*a*) Head office charges	30,969 5 0
(*b*) Charges for the office of the Superintendent of Land Records ...	9,948 2 3
(*c*) Experimental cultivation ...	113 6 6
(*d*) Instruments, &c., for conducting crop experiments	72 12 0
(*e*) Veterinary charges	1,953 13 0
(*f*) Rain-gauges	88 4 6
(*g*) Economic collections	354 2 6
Total	43,499 13 9

† This includes—

				Rs. a. p.
(*a*) Cost of Jaintia Settlement office				5,749 15 4
(*b*) „ Cachar „ „				40,543 4 4
Total				46,293 3 8

‡ This includes—

	Rs. a. p.
(*a*) Registrar kanungos	7,303 9 5
(*b*) Assistant „	2,485 0 9
(*c*) Supervisor „	16,974 3 4
(*d*) District mandals	84,101 3 7
(*e*) Chainmen and peons	1,357 3 4
(*f*) Temporary establishment	1,863 3 10
(*g*) Travelling allowance	798 4 6
(*h*) Petty construction and repairs	1,468 12 6
(*i*) Cost of instruments and repairs	2,907 9 9
(*j*) Map charges	1,677 8 10
(*k*) Rewards	2,410 10 6
(*l*) Office expenses and miscellaneous	2,149 3 4
Total	1,25,496 7 8

A sum of Rs. 1,700 was drawn during the year for the purpose of purchasing the seven bulls mentioned in paragraph 37 above. This mainly accounts for the increase under the head "Superintendence, &c."

The decrease under the head "Settlement Offices" is due to the reduction in the establishment of the Jaintia Settlement Office. The increase under the head "Kanungo establishment" is due to the promotion of mandals and supervisor kanungos, to fill vacancies in the higher grades, and to the new appointments of pátwáris and supervisor kanungos in Jaintia.

F. J. MONAHAN,

Offg. Director, Department of Land Records and Agriculture, Assam.

Shillong,
The 30th June 1896.

APPENDICES.

APPENDIX A.

Diary Statement of Sub-Deputy Collectors for the year 1895-96.

Name of Sub-Deputy Collector.	District.	Subdivision.	Number of days in charge.	Number of days on tour.										Number of days at office work.	Number of days without work.						Remarks.
				In cadastral mauzas.					In non-cadastral mauzas.												
				Examining chalk-lines.	Testing crops.	Examining mauzadár's papers.	Enquiring into cases.	Miscellaneous work, inspecting* theodolite stations, &c.	Taking measurements.	Examining mauzadár's papers.	Enquiring into cases.	Miscellaneous work.	Total.		Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half pay.	Leave without pay.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Babu Purna Chandra Mitra ...	Sylhet ...	Karimganj ...	366	17	19	30	29	23	23	24	...	14	22	107	†175	9	...	15	...	...	...	24
,, Girin Chandra Das ...	,, ...	Jamira ...	315	6	3	15	...	28	48	...	...	...	...	109	208	...	12	...	...	...	...	12
,, Haren dra Kumar Ghosh ...	,, ...	...	51	...	...	...	...	...	...	...	...	...	...	51	...	...	...	...	...	...	...	...
,, Tripura Charan Mukharji ...	Goalpara ...	Dhubri ...	335*	43	3	70	1	...	55	6	3	10	36	227	64	18	7	10	...	...	...	44
,, Rajani Kanta Bordaloi ...	Kamrup ...	Barpeta ...	366	63	6	16	2	...	55	9	1	13	1	156	102	1	29	18	10	...	...	58
,, Raj Kumar Ray ...	,, ...	...	186	48	...	2	...	...	7	...	...	...	...	57	73	9	...	7	...	...	...	16
,, Bhola Nath Das ...	,, ...	Gauhati ...	366	52	1	27	11	...	55	3	5	...	...	152	156	...	42	8	8	...	...	58
,, Gajendra Das Gupta ...	Darrang ...	Mangaldai ...	2-4	74	11	4	18	...	32	...	...	4	...	138	104	...	26	6	10	...	...	42
,, Harendra Kumar Ghosh ...	,, ...	...	82	9	...	32	7	...	48	...	...	...	...	56	24	...	...	...	...	...	...	...
,, Krishna Chandra Chaudhuri ...	Darrang ...	Tezpur ...	366	85	4	13	16	...	59	...	2	3	26	151	148	...	38	32	6	...	...	73
,, Radha Mohan Das ...	Nowgong ...	Nowgong ...	333	81	19	30	12	...	25	...	...	...	5	137	123	1	6	8	...	...	...	15
,, Raj Kumar Ray ...	,, ...	...	83	4	9	...	1	...	13	...	...	...	...	27	‡ 56	...	...	...	...	...	...	...
Maulvi Ishar Uddin Ahmad ...	Sibsagar ...	Golaghat ...	310*	67	4	17	2	...	59	2	1	...	...	150	138	10	39	6	...	...	...	55
Babu Harendra Kumar Ghosh ...	,, ...	...	99	13	...	2	1	...	8	...	...	...	...	24	3	1	...	...	...	...	...	1
,, Radha Kanta Bordaloi ...	,, ...	Jorhat ...	366	96	1	3	10	...	63	...	...	...	...	173	135	10	35	21	...	...	...	66
,, Pratidhar Chalika ...	,, ...	Sadiya ...	316	34	...	6	32	...	13	1	...	...	...	86	113	...	15	...	...	...	...	15
,, Raj Kumar Ray ...	,, ...	...	134	11	1	10	13	...	68	...	...	...	...	103	28	2	1	...	...	...	...	3
Maulvi Mojilat Ullah ...	Lakhimpur ...	Dibrugarh ...	365	62	6	10	20	...	38	5	3	2	70	196	143	...	23	...	...	...	...	23
Munlvi Muhammad Sadir ...	,, ...	North Lakhimpur ...	366	45	5	9	19	...	15	34	3	15	30	172	154	23	11	6	...	...	...	40

* Exclusive of 31 days spent at Tezpur in learning the use of the theodolite.
† The subdivision was without a Sub-Deputy Collector for 30 days.
‡ The subdivision was without a Sub-Deputy Collector for 14 days.

APPENDIX B.

Diary Statement of Supervisor Kanungos and Surveyors for the year 1895-96.

Name of supervisor kanungo.	Name of circle.	District.	Subdivision.	Number of days in charge.	Number of days on tour.										Number of days at office work.	Number of days without work.						Remarks.
					In cadastral mauzas.					In non-cadastral mauzas.												
					Running check lines.	Testing crops.	Examining settlials' papers.	Recording into cases.	Miscellaneous work, Inspection, Office settlials.	Testing measurements.	Examining mandals' papers.	Inquiring into cases.	Miscellaneous work.	Total.		Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half pay.	Leave without pay.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Sasi Kumar Kar*	Circle I ...	Sylhet ...	North Sylhet ...	265	8	...	12	55	22	...	...	...	...	97	138	...	12	...	...	...	...	12	* Joined on the 19th April 1895.
Sarada Kanta Ganguli (Offg.) ...	,, ...	,, ...	,, ...	83	...	...	...	67	...	...	...	...	...	67	16	...	...	...	...	...	...	...	
Kamini Kumar De	,, II ...	,, ...	,, ...	277*	3	...	6	140	10	...	...	...	...	159	100	6	12	...	...	...	...	18	† Was on deputation to the Survey Camp in Cachar for 89 days.
Abdur Sobhur	,, III ...	,, ...	,, ...	304	13	...	10	121	15	...	...	...	...	159	139	4	3	...	1	...	...	8	
Ambika Charan Banerji	,, IV ...	,, ...	,, ...	365†	23	...	20	89	20	...	...	...	...	164	185	5	12	...	...	...	...	17	
Sahabuddin	Pajali ...	,, ...	,, ...	153	49	...	...	4	22	...	...	...	...	75	63	7	1	7	...	...	...	15	
Dharmananda	,, ...	,, ...	,, ...	30	...	...	...	...	...	...	...	...	...	...	28	...	2	...	...	...	...	2	
Joyram Das	,, ...	,, ...	,, ...	183	107	19	...	...	26	...	...	...	...	152	22	...	9	...	...	...	...	9	
Basir Ali Biswas	Barpeta ...	Kamrup ...	Barpeta ...	376	92	10	12	11	64	...	2	...	...	191	64	5	3	12	...	...	...	20	
Sitanath Deka	,, ...	,, ...	,, ...	91	...	...	...	...	...	...	...	...	...	...	91	...	...	...	...	...	...	...	
Bhagirath Deka	Roha ...	,, ...	,, ...	278	186	17	11	13	30	...	...	...	...	177	74	3	...	22	...	...	...	25	
Hiranath Deka	,, ...	,, ...	,, ...	90	21	4	...	1	12	...	...	...	...	38	44	4	...	4	...	...	...	8	
Nityananda	Beltala ...	,, ...	Gauhati ...	179	17	6	8	5	48	...	...	...	...	84	51	19	...	25	...	...	...	44	
Chandiram	,, ...	,, ...	,, ...	62	20	...	12	...	21	...	...	...	...	53	3	6	...	...	...	3	...	6	
Nar Nath	,, ...	,, ...	,, ...	125	2	...	...	...	11	...	...	...	...	13	76	5	11	20	...	...	...	36	
Kan Nath	Palasbari ...	,, ...	,, ...	274	75	37	28	3	10	...	...	...	...	153	67	12	4	8	...	...	...	24	
Jagatram	,, ...	,, ...	,, ...	92	14	...	2	2	...	...	...	...	...	18	68	7	...	9	...	...	...	16	
Rasqueb	Boko ...	,, ...	,, ...	366	77	45	39	1	30	6	...	...	2	200	132	16	15	2	...	...	...	33	
Nar Nath	Patidarrang ...	,, ...	,, ...	121	12	...	10	25	15	...	...	...	...	62	53	5	...	1	...	...	...	6	
Baliram	,, ...	,, ...	,, ...	245	16	10	...	47	114	...	...	...	...	187	20	15	3	...	...	...	...	18	

Jiuram	Hajo ...	Kamrup ...	Gauhati ...	261	50	10	8	14	48	...	...	...	...	130	100	4	16	11	...	...	...	31						
Chinisam	,, ...	,, ...	,, ...	105	26	...	4	13	29	...	...	...	...	72	29	4	1	...	...	...	...	5						
Molan Chandra	Barkhetri ...	,, ...	,, ...	358*	112	5	26	30	15	...	...	...	...	136	120	8	13	...	...	...	...	21						
Titaram	Barigog ...	,, ...	,, ...	256	36	22	2	6	87	...	...	...	...	154	81	15	5	7	...	...	...	21						
Dhaneswar	,, ...	,, ...	,, ...	110	10	...	...	5	87	...	...	...	...	68	43	4	...	...	...	...	...	4						
Mantaram	Mandari ...	,, ...	,, ...	244	32	13	...	7	85	...	...	...	...	134	59	41	9	...	...	...	...	50						
Lalitram	,, ...	,, ...	,, ...	122	16	...	31	10	9	...	...	...	...	66	33	18	...	2	...	...	...	23						
Santiram	Nalbari ...	,, ...	,, ...	200	11	27	18	32	81	...	...	...	...	176	28	22	4	...	...	...	...	26						
Nanai	,, ...	,, ...	,, ...	105	8	...	27	10	10	...	...	...	...	55	41	10	...	...	...	...	...	10						
Dhir Singh	Tambulpur** ...	,, ...	,, ...	137	84	...	...	...	43	...	...	...	...	77	51	4	3	...	2	...	...	9						
Jagaram	,, ...	,, ...	,, ...	193	67	9	31	5	20	...	...	...	...	182	42	24	...	...	...	...	...	24						
Madhabram	Barama ...	,, ...	,, ...	306	53	19	5	14	177	...	...	...	...	268	75	6	7	10	...	...	...	23						
Chandra Kanta Sarkar	Sipajhar ...	Darrang ...	Mangaldai ...	235	43	11	5	5	26	...	...	...	...	94	132	7	2	...	...	...	...	9						
Saruman Das	,, ...	,, ...	,, ...	131	23	5	3	17	11	...	...	...	...	29	56	2	...	14	...	...	...	16						
Kalamani Das	Mangaldai ...	,, ...	,, ...	366	172	12	...	13	55	...	...	...	...	252	89	7	18	...	...	...	...	25						
Jajnoram Sahariya	Kakajuan ...	,, ...	,, ...	304	42	4	...	4	69	...	...	...	...	119	131	22	17	22	3	...	...	61						
Bapuram Das	,, ...	,, ...	,, ...	60	12	7	...	...	10	...	...	...	...	32	23	9	...	1	...	...	...	10						
Kanmal Das	Bengbari ...	,, ...	,, ...	325	116	8	...	2	77	...	...	...	...	208	124	12	3	14	...	...	...	29						
Durgaram Datta	Western ...	,, ...	Tezpur ...	366†	103	14	...	7	41	...	...	...	...	165	129	...	45	31	...	...	...	81						
Nandi Nath Sarma (Offg.)	Eastern ...	,, ...	,, ...	87‡	23	10	34	...	6	...	...	...	...	73	14	...	...	...	...	...	...	...						
Rabi Charan Das	Town ...	Nowgong ...	Nowgong ...	71	...	...	...	4	6	...	...	...	...	10	11	...	...	...	...	50	...	50						
Umakanta Sarma	Silchat ...	,, ...	,, ...	226	87	25	...	19	62	...	...	...	...	143	124	12	15	1	...	...	...	28						
Ram Nath Datta	,, ...	,, ...	,, ...	340	68	15	11	17	105	...	5	1	...	220	112	1	2	3	2	...	...	8						
Jayram Das	Dabaka ...	,, ...	,, ...	176	21	...	20	14	39	...	...	...	...	94	97	1	1	1	...	...	...	3						
Danapati Das	,, ...	,, ...	,, ...	192	7	5	25	9	82	...	2	...	...	130	45	11	3	3	...	...	...	17						
Sibnath Sarma	Roha ...	,, ...	,, ...	366	117	13	5	3	32	...	4	...	3	203	120	...	13	...	28§	...	...	43						
Gobindram Datta	Dhing ...	,, ...	,, ...	366	97	6	...	7	39	...	...	...	...	199	93	3	15	...	34	...	...	72						
Bhakatram Datta	Gerua ...	,, ...	,, ...	325	61	8	...	...	41	...	...	...	...	110	181	14	3	15	...	...	...	34						
Gopal Chandra Goswami	,, ...	,, ...	,, ...	41	3	...	...	...	25	...	...	...	...	28	7	6	...	...	...	...	...	6						
Lakshmiram Das	Ghuzua ...	,, ...	,, ...	366	70	11	21	7	115	...	...	...	...	224	101	3	5	4	28¶	...	...	41						
Tiaram Gogai	Mayang ...	,, ...	,, ...	366	99	25	5	1	79	...	3	...	...	212	89	13	39	13	7	...	...	65						

* Exclusive of 28 days spent on demarcation of special estates.

** The circle was without a supervisor excepting for 31 days.

† Was in charge of both Eastern and Western Circles for 279 days.

‡ Durga Ram, the supervisor excepting of the Western Circle, was in charge for 279 days.

§ Exclusive of 28 days spent at Tezpur in learning the use of theodolite.

¶ Bhagiram mandal was in charge during this time.

§ Gopinath Sarma mandal was in charge during this time.

Name of supervisor kanungo.	Name of circle.	District.	Subdivision.	Number of days in charge.	Number of days on tour.									Number of days at office work.	Number of days without work.						Remarks.
					In cadastral mauzas.					In non-cadastral mauzas.											
					Running check lines.	Testing crops.	Examining mandals' papers.	Enquiring into cases.	Miscellaneous work, including the theodolite station.	Testing measurements.	Examining mandals' papers.	Enquiring into cases.	Miscellaneous work.	Total.		Travelling from place to place.	Gazetted holidays.	Sickness.	Privilege leave.	Leave on half pay.	Leave without pay.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Manuram Talukdar	Northern ...	Sibsagar ...	Golaghat ...	366	55	...	...	...	61	...	...	4	...	120	293	...	...	...	43	...	...	43	
Puaram Mahanta	Southern ...	,, ...	,, ...	331	55	21	99	4	42	...	...	...	...	218	100	12	17	4	...	...	...	33	
Haranath Mandal (Offg.) ...	,, ...	,, ...	,, ...	16	4	...	...	...	...	...	...	...	...	4	7	5	...	1	...	...	...	6	
Bholaram Datta (Offg.) ...	Eastern ...	,, ...	Jorhat ...	366	17	12	...	21	62	...	...	...	...	172	131	25	16	22	...	...	...	63	
Mahiram Das (Senior) ...	North-western ...	,, ...	,, ...	351	65	26	12	33	55	1	...	...	...	192	146	3	12	3	...	...	...	17	
Pitharam Saikia (Offg.) ...	,, ...	,, ...	,, ...	12	...	...	...	...	...	...	...	...	...	...	12	...	...	...	...	...	...	...	
Kaliram Das	South-western ...	,, ...	,, ...	316	35	13	16	14	66	...	...	...	...	144	116	1	13	11	31	...	...	56	
Kisaram Das (Offg.) ...	,, ...	,, ...	,, ...	31	...	...	2	1	20	...	...	...	...	23	8	...	...	...	...	...	...	...	
Mitharam Kakati (Offg.) ...	,, ...	,, ...	,, ...	73	2	...	2	...	10	...	...	...	...	14	4	...	...	2	...	...	...	2	
Minaram Das	Majuli ...	,, ...	,, ...	338	72	3	4	1	121	...	...	...	...	202	86	14	18	4	17	...	...	50	Exclusive of 28 days spent in Tezpur in learning the use of the theodolite.
Shibram Bora	Eastern ...	,, ...	Sadr ...	366	102	18	24	95	13	...	...	...	...	252	102	...	1	11	...	...	...	12	
Gobinda Nath Ray ...	Central ...	,, ...	,, ...	366	92	30	22	39	18	...	...	...	...	201	146	2	2	3	12	...	...	19	
Lalikram Chandiduri ...	Western ...	,, ...	,, ...	376	80	14	8	90	13	...	...	...	...	205	136	2	6	17	...	...	...	25	
Maheswar Das	Dibrugarh ...	Lakhimpur ...	Dibrugarh ...	366	83	17	10	22	65	...	...	...	...	194	155	4	10	3	...	...	...	17	
Lakshmi Kanta Das	Chabua ...	,, ...	,, ...	366	51	19	23	19	62	...	...	...	...	176	155	1	16	4	14	...	...	35	
Jagannath Deka	North Lakhimpur ...	,, ...	North Lakhimpur ...	366	104	6	19	53	44	...	...	...	...	226	146	5	10	2	...	...	...	17	
Samudra Narayan Das, Surveyor ...	...	Kamrup ...	Gauhati ...	366	18	...	...	...	24	8	...	2	55	112	2 9	46	...	...	...	...	...	46	
Muzaffar Ali, Surveyor ...	...	Lakhimpur ...	Dibrugarh ...	366	...	...	...	...	...	50	6	65	71	192	99	6	33	31	5	...	...	75	

APPENDIX C.

Work Statement of District and Subdivisional Officers for the year 1895-96.

PART I.—DEPUTY COMMISSIONERS.

Name of officer.	District.	Subdivision.	Number of supervisor kanungos whose work was inspected.					Area not cadastrally surveyed.													Area found wrongly classified.			Remarks.
			Number of supervisor kanungos whose work was inspected.	Number of villages tested.	Number of mauzadis.			Testing by check lines.						Testing without checking.		Number of villages.	Number of mauzadis.						Bari shown as		
					Total number.	Whose papers examined.	Whose field work tested.	Number of lines.	Number of tests.	Number of effects.	Length of lines in miles.	Area of intervening cultivation in jurisdiction acres.	Number of times rates per square mile of intervening cultivation.	Number of fields tested.	Area, including jungle, in acres.		Total number.	Whose papers examined.	Whose field work tested.	Total area in acres as shown by mauzadari.	Total area (in acres) as shown by measurements.	Percentage of error.	Area (in acres) of concealed cultivation discovered.	*Bajhi.*	*Sarugati.*	*Rupit* shown as *Sarugati.*	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
																								Acres.	Acres.	Acres.	
Captain P. R. T. Gurdon, Deputy Commissioner.	Goalpara ...	Dhubri ...	2	6	36	7	3	12	154	365	6·47	3,836	1·05	...	...	...	8	8	...	...	...	...	...	...	...	...	
R. B. McCabe, Esq., Deputy Commissioner.	Kamrup ...	Gauhati ...	...	5	270	32	5	9	81	82	2·95	47,894	0·01	...	...	...	31	4	..	...	...	...	...	...	...	...	
Lieutenant Colonel M. A. Gray, Deputy Commissioner.	Darrang ...	Tezpur ...	2	5	105	8	5	13	76	111	5·10	11,562	9·28	...	...	...	31	2	..	...	...	...	...	...	...	...	
F. MacSkimr, Esq., Deputy Commissioner.	Nowgong ...	Nowgong ...	...	2	136	...	2	2	38	47	1·55	29,266	0·04	...	...	...	11	...	...	...	...	...	...	...	...	...	
F. J. Monahan, Esq., Deputy Commissioner.	Sibsagar ...	Sadr ...	6	12	184	65	12	18	121	185	6·09	20,232·91	0·19	...	...	...	19	...	...	...	...	...	...	1·90	...	...	
H. C. Barnes, Esq., Assistant Commissioner.	Lakhimpur ...	Dibrugarh ...	1	6	98	...	4	11	135	238	6·61	1,267·43	2·12	...	...	14	48	..	9	472·73	512·91	8·60	5·26	...	...	...	

PART II.—SUBDIVISIONAL OFFICERS AND EXTRA ASSISTANT COMMISSIONERS.

Babu Chandra Kanta Sen, Extra Assistant Commissioner, Faintia.	Sylhet ...	North Sylhet (Jaintia).	3	9	52	16	9	4	41	24	1·73	1,401	0·76	51	300	...	...	...	...	...	...	...	5	...	...	...	
Babu Madhab Chandra Bardalai, Extra Assistant Commissioner.	Kamrup ...	Barpeta ...	3	2	65	4	12	22	136	268	10·71	19,869·26	0·54	...	...	5	11	1	3	335	327	2·32	...	...	...	...	
D. H. Leet, Esq., I.C.S., Assistant Commissioner.	Darrang ...	Mangaldai ...	3	4	30	33	4	*10 †19	69	57	*3·31 †1·78	8,178	0·30	...	...	...	4	...	...	...	...	...	...	...	...	...	
Babu Pinadihar Chaliha, Extra Assistant Commissioner.	,, ...	,, ...	...	2	80	...	1	2	8	20	0·63	8,178	0·05	...	...	...	4	...	...	...	...	...	...	...	...	...	
E. C. Allen, I.C.S., Assistant Commissioner.	Sibsagar ...	Golaghat ...	3	11	57	51	10	*8 †5	...	...	*6·21 †2·91	4,152·17	1·40	...	...	...	3	...	...	...	...	...	...	...	...	...	
W. A. H. Duncan, Esq., I.C.S., Assistant Commissioner.	,, ...	Jorhat ...	5	4	73	65	3	*23 †13	11 17	12 13	*0·44 †0·62	6,327	0·10	...	...	1	5	1	1	20	40	33·33	...	...	...	...	

* In professionally surveyed area, † In area surveyed in extension.

APPENDIX D.

Work Statement of Sub-Deputy Collectors for the year 1895-96.

Name of Sub-Deputy Collector.	District.	Subdivision.	Area cadastrally surveyed.													Area not cadastrally surveyed.								Area found wrongly classified.			Remarks.
			Number of villages tested.	Number of mandals.			Testing by check lines.						Testing without check lines.			Number of villages.	Number of mandals.							Basti shown as		
				Total number.	Whose papers examined.	Whose field work tested.	Number of lines.	Number of factors.	Number of offset-lines.	Length of lines in miles.	Area of fluctuating cultivation in jurisdiction in acres.	Number of linear miles per square mile of fluctuating cultivation.	Number of fields tested.	Area, including jungle, in acres.			Total number.	Whose papers examined.	Whose field work tested.	Total area (in acres) as shown by ameenadar.	Total area (in acres) as shown by revenuement.	Percentage of error.	Area (in acres) of concealed cultivation discovered.	*Kayti* (acres).	*Tarkapati* (acres).	*Kayti* shown as *tarkapati* (acres).	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		16	17	18	19	20	21	22	23	24	25	26	27
Babu Purna Chandra Mitra	Sylhet	Karimganj	53	4	4	4	(*a*)31	327	324	1·02	...	...	38	41		...	...	...	...	...	...	...	...	...	...	...	
,, Girish Chandra Das	,,	North Sylhet	48	92	17	14	(*a*)18	103	60	4·50	1,451	1·28	13	4,038·70		...	...	...	...	...	...	...	...	...	...	...	
							(*b*)3	482	1,307	24·06																	
,, Tripura Charan Mukharji	Goalpara	Dhubri	17	38	22	22	(*d*)2	154	365	6·47	3,336	3·91	94	...		4	8	3	4	93·71	93·84	0·14	·75	...	...	...	
							...	...	...	(*f*)14·90																	
							...	...	...	(*h*)4·29																	
							(*a*)91	907	1,056	40·16		1·32	384	3,002		...	11	6	1	12	16	...	4	16	21	...	
,, Rajani Kanta Bardalai	Kamrup	Barpeta	83	60	50	49	(*b*) 2	32	61	1·09	19,859·86	...	...	...		...	...	...	...	...	...	...	...	...	...	...	
							(*c*)36	231	332	21·23		...	227	345		...	...	...	...	...	...	...	...	...	...	...	
							...	...	...	(*e*)37·03		...	...	...		...	...	...	...	...	...	...	...	...	...	...	
,, Raj Kumar Rai	,,	,,	37	60	22	19	(*a*)47	527	677	22·88	19,859·86	0·82	...	...		...	...	3	...	...	...	...	6·61	...	...	...	
							(*c*) 3	30	36	2·72																	
							(*a*)74			30·21																	
,, Bholi Nath Das	,,	Gauhati	88	210	201	71	(*b*) 3	1,185	1,434	1·33	28,024	0·07	67	76·03		3	20	13	3	55	49	10·20	1	...	...	...	
							(*c*)23			12·28																	
							(*e*)10			6·02																	
							(*a*)31	440	522	18·77																	
							(*b*) 2	22	28	1·60																	
,, Jagneswar Das Gupta	Darrang	Mangaldai	80	80	73	60	(*c*)43	282	444	20·57	8,178	3·07	88	84		...	4	1	1	...	...	...	...	...	...	...	
							(*d*) 1	53	57	1·36																	
							(*e*)10	...	...	0·51																	

Babu Krisna Chandra Chaudhuri	,,	...	Tezpur	...	44	26	23	23	(a) 49	328	419	29·24																	
									(b) 5	39	25	3·91	3,484	6·44	99	983	...	27	27	...	...	...	...	...	...	...	...	...	...
									(c) 39	456	573	16·40																	
									(d) 7	173	67	4·30																	
										(a)656	567	22·21																	
										(b)309	480	13·24																	
,, Radha Mohan Das	...	Nowgong	...	Nowgong	...	221	158	156	101	103	(c)250	296	12·19	29,265	0·76	705	705	...	11	6	...	...	...	...	...	...	...	...	...
										(d)87	91	3·00																	
										(e)28	47	1·88																	
,, Raj Kumar Ray	...	,,	...	,,	...	12	156	65	12	(a) 3	36	21	1·31	...	0·04	860	404	...	11	...	...	...	...	...	...	6·28	...	0·61	...
									(a) 47	282	309	15·30																	
Munshi Didar Uddin Bora	...	Sibsagar	...	Golaghat	...	43	52	52	42	(c) 3	21	5	0·29	4,152·17	3·05	1,020	2,088	2	3	3	1	16	17	6·32	0·35	0·14	...	...	* Includes 1854·36 acres of the Ahatguri mauza.
									(f) 33	8	45	20·47																	
									(g) 33	5	24	9·13																	
									(a) 6	90	170	5·42																	
Babu Harendra Kumar Ghosh	,,	...	,,	...	14	62	8	7	(c) 13	269	197	6·03	4,75·17	1·23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
									(g) 19	...	...	5·03																	
					...				(a) 66	650	1,333	27·07																	
,, Radha Kanta Handiqui	...	,,	...	Jorhat	...	93	73	50	42	(b) 8	77	155	3·68	6,·27	2·24	680	310	...	5	...	...	...	...	...	...	...	...	...	...
									(c) 3	9	13	1·48																	
					...				...	...	...	(g) 29·10																	
,, Phanidhar Chaliha	...	,,	...	Sadr	...	25	69	69	14	(a) 43	376	557	17·01	9,153·77	1·43	...	...	1	2	2	1	21·83	23·23	0·12	...	...	...	...
									(c) 7	46	115	2·07																	
									(a) 6	62	92	3·76																	
,, Raj Kumar Ray	...	,,	...	,,	...	19	69	38	8	(b) 2	18	23	0·81	9,153·77	1·27	168	863	...	...	...	...	...	...	...	...	62	...	...	...
									(c) 52	119	183	14·45																	
									(a)146	797	1,831	34·02	...	...	139	116·42	5	48	17	4	229·37	226·23	2·05	...	...	...	...
Munshi Mashiat Ulla	...	Lakhimpur	...	Dibrugarh	...	77	26	26	24	(b) 15	100	229	6·29	1,337·43	2·55	...	...	...	...	...	...	...	...	...	...	...	...	...	...
									(c)151	289	447	20·77	...	...	72	140·00	...	...	...	...	...	...	...	...	...	...	...	...
									(a) 51	377	634	15·60	...	...															
									(c) 15	54	109	13·60	...	...															
Maulvi Muhammad Sadir	...	,,	...	North Lakhimpur.	...	91	19	19	18	(d) 5	52	61	2·27	1,271·73	13·35	148	426·02	15	14	10	10	62·04	68·22	7·99	2·74	...	...	...	...
									(e) 2	17	30	0·65	...	...															
									(f) 3	...	...	0·34	...	...															
Total	...	...	...	.....	.....	1,004	663	577	523	1,482	10,400	16,000	649·02	118,940·99	3·49	4,576	14,354·17	30	164	93	25	592·75	592·93	0·20	334·09	10·14	27·61	...	

(a) Independent check lines—in cadastral area.
(b) Check lines run over the lines of subordinate officers—in cadastral area.
(c) Independent check lines run in extension survey.
(d) With superior officers in extension survey.
(e) With superior officers in cadastral area.
(f) Lines run in surveying waste land grants.
(g) In testing work in connection with demarcation of special estates.
(h) Check lines run on extension traverse shoes.

APPENDIX E.

Work Statement of Supervisor Kanungos and Surveyors for the year 1895-96.

Name of supervisor kanungo.	Circle.	District.	Subdivision.	Area cadastrally surveyed.													Remarks.
				Number of mandals.				Testing by check lines.						Testing without check lines.			
				Number of villages tested.	Total number.	Whose papers examined.	Whose field-work tested.	Number of lines.	Number of datums.	Number of offsets.	Length of lines, in miles.	Area of fluctuating cultivation in jurisdiction, in acres.	Number of these miles per square mile of fluctuating cultivation.	Number of fields tested.	Area, including jungle, in acres.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		17
Sasi Kumar Kar	Circle No. I ...	Sylhet ...	North Sylhet ...	8	16	16	8	20	62	107	2·80	103	16·30	175	2,863		
Kanjni Kumar Da	,, ,, II ...	,, ...	,, ,, ...	4	10	10	3	6	11	49	2·0	55	19·20	218	837		
Abdus Sobhar	,, ,, III ...	,, ...	,, ,, ...	30	14	14	6	18	188	260	7·90	811	9·80	228	697		
Ambika Charan Banerjee	,, ,, IV ...	,, ...	,, ,, ...	28	12	12	6	72	470	216	12·67	746	19·70	87	3,449		
Shahab Uddin	Baijni ...	Kamrup ...	Barpeta	(a) 65	23	23	23	92	332	824	22·90	4,650	12·80	392	632		
				(b) 7		7	7	30	191	271	17·00			172	192		
Joyram Deka	,, ...	,, ...	,, ...	(a) 49		23	23	74	1,006	811	40·09			1,454	766		
				(b) 22	19	13	13	125	354	734	11·02	7,562	7·70	188	139		
Basir Ali Biswas	Barpeta ...	,, ...	,, ...	(a) 37		19	13	153	1,317	1,209	42·21			254	250		
				(b) 15			4	20	177	232	23·38			59	45		
				(c) 53			18	81	901	1,538	43·02			1,628	3,501		
Bhagirath Deka	Koha ...	,, ...	,, ...	(b) 10			...	27	208	613	13·68			316	...		
				(d) 3		18	...	3	55	89	1·84	7,658	8·30	...	...		
Shib Nath (offg.)	,, ...	,, ...	,, ...	(a) 10			...	14	102	194	6·72			230	348		
Nityananda	Beltola ...	,, ...	Gauhati	(a) 37		13	12	9	122	146	5·91			1,416	1,150		
				(c) 7			...	11	94	113	4·48			...	...		
Nar Nath (offg.)	,, ...	,, ...	,, ...	(b) 2		18	13	3	21	38	1·25	1,114	10·27	91	55		
Chandi Ram ,, ...	,, ...	,, ...	,, ...	(a) 2			2	3	44	54	0·97			29	30		
				(b) 6			6	18	223	332	9·75			311	284		
				(a) 135		31	28	63	928	1,175	39·25			5,609	6,455		
Kan Nath	Palasbari ...	,, ...	,,	(c) 2			...	2	26	23	0·72			...	...		
				(b) 7		31	...	17	247	244	9·51	4,662	7·16	...	...		
Jagatram	,, ...	,, ...	,, ...	(c) 5			15	10	121	166	3·41			...	...		

Rangdev Sarma	Boko ...	,, ...	,,		(a) 69		23	23	71	324	1,395	40·66				9,060	17,630	
					(c) 5	25	...	...	8	98	124	3·38	6,388	3·03	222	904		
					(b) 14		4	4	36	399	748	18·22			822	3,190		
Nar Nath Das	Patidarrang ...	,, ...	,,		(a) 13		20	9	9	61	72	2·44			224	134		
Baliram Das (Offg.)	,, ...	,, ...	,,		(a) 36	29	20	18	37	336	335	11·65	1,240	7·28	103	36		
Jiuram	Hajo ...	,, ...	,,		(a) 64		21	18	76	1,267	1,345	39·50			2,265	1,885		
					(c) 1	21	...	1	2	17	21	0·62	2,822	14·14	...	...		
Chiniram (Offg.)	,, ...	,, ...	,,		(a) 23		10	16	42	770	930	29·05			...	...		
Malan Chandra Bora	Barkhetri ...	,, ...	,,		(a) 7	17	16	16	230	2,469	2,742	82·25	5,314	19·03	3,819	2,670		
Tiharam Datta	Barigog ...	,, ...	,,		(a) 29	14	14	11	49	541	734	18·00	1,625	19·18	2,376	4,670		
Dhaneswar Das	,, ...	,, ...	,,		(a) 13		14	8	28	338	553	11·00			755	359		
Mantaram	Pandori ...	,, ...	,,		(a) 33	12	...	12	40	411	765	16·64	832	19·75	230	454		
Lalitram	,, ...	,, ...	,,		(a) 6		12	6	7	49	66	2·21			406	32		
Santiram	Naibari ...	,, ...	,,		(a) 29	19	19	14	30	373	366	9·32	802	19·65	6,165	2,632		
Nemai	,, ...	,, ...	,,		(c) 2		19	...	11	105	183	3·26			...	...		
					(a) 12		...	7	51	185	411	9·00			...	...		
Dhir Singh Deka...	Tambulpur ...	,, ...	,,		(b) 9		...	17	38	277	484	15·00	1,237	41·23	260	343		
					(a) 45	17	17	16	73	343	693	42·00			89	70		
Jagatram (Offg.)	,, ...	,, ...	,,		(b) 7		...	2	35	...	...	14·00			...	...		
Madhabram Gagai	Borama ...	,, ...	,,		(a) 45	18	18	18	66	558	668	30·61	2,108	9·30	2,579	2,769		
Kalsmani Das	Mangaldai ...	Darrang ...	Mangaldai		(c) 55	22	22	22	107	564	1,101	40·32	1,692	33·84	3,391	5,633		
					(b) 15				110	295	380	46·39						
Jajnaram Saharlya	Kalaigaon ...	,, ...	,,		(a) 53	22	22	22	51	309	746	16·97	2,183	7·58	648	1,642		
Baparam Das	,, ...	,, ...	,,		(b) 5		2	2	3	17	26	1·03			43	53		
					(c) 12		22	22	21	109	137	7·83						
Chandra Kanta Sarkar	Sipajhar ...	,, ...	,,		(a) 38	20	20	20	84	610	1,263	32·97	2,611	14·07	173	174		
Sonaram Das	,, ...	,, ...	,,		(a) 20		20	20	55	439	991	22·62						
Rammal Das	Bengbari ...	,, ...	,,		(a) 84	16	16	16	69	330	692	42·11	1,792	10·14	1,983	1,084		
Durgaram Datta*	Eastern and Western...	,, ...	Tezpur		(a) 102	28	28	27	99	881	1,124	71·03	3,484	13·25	2,413	2,783		
Nandi Nath Sarma (offg.)	Eastern ...	,, ...	,,		(a) 28		17	14	(a) 35	332	490	21·22	2,069	6·38	207	631		
Rabi Charan Das	Town ...	Nowgong ...	Nowgong		...	...	...	...	...	...	...	...	...	...	...	...		
Uma Kanta Sarma	,, ...	,, ...	,,		(c) 61	29	29	27	40	442	719	21·19	1,453	9·29	2,480	1,103		

* Durga Ram, was in charge of both the circles for the greater portion of the year.

(a) Independent check lines in professionally-surveyed area.
(b) ,, ,, ,, run in extension survey.
(c) With superior officers in professionally-surveyed area.
(d) ,, ,, extension area.

APPENDIX E—*continued.*

Name of supervisor kanungo.	Circle.	District.	Subdivision.	Area cadastrally surveyed.												Remarks.
				Number of villages tested.	Number of mandals.			Testing by check lines.						Testing without check lines.		
					Total number.	Whose papers examined.	Whose field-work tested.	Number of lines.	Number of areas.	Number of offsets.	Length of lines, in miles.	Area of contesting cultivation in proportion, in acres.	Number of linear miles per square mile of distinctly cultivation.	Number of fields tested.	Area, including jungle, in acres.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Ramnath Datta	...	Silghat	...	Nowgong	...	Nowgong	(a) 67	20	20	20	54	483	886	24·35	3,397	7·15	2,264	120
							(b) 8				24	348	562	13·62			167	23
Jayram Das	...	Dobaka	...	,,	...	,,	(a) 38				89	953	1,219	41·74			301	199
							(a) ...	17	17	17	12	119	165	4·35	1,673	19·32	...	...
Dangmai Das	...	,,	...	,,	...	,,	(b) 33				28	22	39	6·00			371	747
Sib Nath Sarma	...	Roha	...	,,	...	,,	(a) 131	22	22	22	220	1,576	3,830	54·93	2,795	19·43	1,140	3,230
Gobindaram Datta	...	Dhing	...	,,	...	,,	(a) 92	22	22	22	164	1,314	3,437	89·37	8,563	6·67	453	540
Bhakatram Datta	...	Gerua	...	,,	...	,,	(a) 60				125	1,087	1,410	63·65				
Gopal Chandra Goswami (offg.)	...	,,	...	,,	...	,,	(a) 2	17	17	17	3	27	29	1·78	5,687	7·35	...	...
							(d) 2				3	55	71	2·54				
Lakhimiram Das	...	Ghugua	...	,,	...	,,	(a) 80	18	18	15	107	1,336	2,231	63·17	4,338	9·28	597	2,893
							(a) 33				84	862	937	49·23			1,452	970
Tiaram Gacai	...	Mayang	...	,,	...	,,	(b) 3	11	11	11	11	145	142	6·10	1,382	20·66	150	335
							(c) 1				2	22	24	1·15			...	...
							(a) 72	25	25		101	427	883	22·69				
							(c) 2	2	2		4	10	133	2·13				
Manuram Talukdar	...	Northern	...	Sibsagar	...	Golaghat	(b) 6	29	4	5	28	274	335	9·73	386·41	37·63	...	...
							(d) 4		3	2	10	233	177	5·78				

Pranam Mahanta	Southern	,, ...	,, ...		82	21	21	21	(a) 190	303	968	37·22	1,900·60	14·85	4,344	4,583	
									(b) 90	59	67	3·63					
Bholaram Datta	Eastern	,, ...	Jorhat	(a) 75	19	19	19	19	73	337	1,053	29·96	1,622	12·93	295	167·77	
				(b) 4					3	134	135	9·26			31	16·51	
Katiram Das	South-Western	,, ...	,,	(a) 63	17	16	15	60	509	823	24·61	1,149	18·26	751	824	
Mitharam Kakati (Officiating) ...	,, ...	,, ...	,,	(a) 2	...	...	2	3	13	26	0·45						
Mahiram Das (Senior)	North-Western ...	,, ...	,,	(a) 61	24	12	24	40	292	744	19·28	1,321	11·23	3,846	1,114·94	
				(b) 15				35	301	461	13·16			201	997·74	
Minaram Das	Majuli	,, ...	,,	(a) 41	19	19	15	158	1,373	2,124	56·05	4,188·95*	9·46	376	3,054	*Includes 1,554·95 acres of the Abaiguri mauza in the Golaghat subdivision.
Shibram Bora	Eastern	,, ...	Sadr	(a) 151	20	20	20	116	1,129	2,442	51·15	3,841·60	9·32	3,052	4,009·32	
Gobindanath Ray	Central	,, ...	,,	(a) 47	29	29	29	84	496	565	33·04	2,612·71	14·04	216	313·71	
				(b) 16	...	...	...	40	278	676	22·13			406	444·38	
				(c) 6	...	...	...	6	53	47	2·29			...	...	
Lalitram Chandhari	Western	,, ...	,,	(a) 61	29	29	29	121	943	1,764	47·49	2,739·47	19·82	2,221	3,300·80	
				(b) 9	...	...	...	29	146	192	9·62					
				(c) 3	...	...	...	3	43	102	1·47					
Moheswar Das	Dibrugarh ...	Lakhimpur ...	Dibrugarh	(a) 68	13	13	13	45	316	438	12·30	732·23	28·20	1,330	1,925·93	
				(c) ...	...	...	...	59	...	...	16·29			...	...	
Lakshmi Kanta Das	Chabua	,, ...	,,	(a) 93	13	13	13	113	693	1,541	34·36	1,356·20	25·48	537	322·21	
				(b) 1	1	...	...	63	22	31	15·22			...	...	
Jagannath Deka	North Lakhimpur ...	,, ...	North Lakhimpur	(a) 80	10	19	19	113	710	970	33·38	1,271·73	30·02	851	1,490·01	
				(b) 5		...	3	77	104	276	26·28			...	...	
Sasudra Narayan Das, Surveyor ...	,, ,, ...	Kamrup ...	Gauhati	(a) 3	...	...	2	4	79	65	2·11	13,371	0·10	...	..	
				(b) 10	...	...	9	13	163	189	9·02					
Mazaffar Ali, Surveyor	,, ,, ...	Lakhimpur ...	Dibrugarh	...	...	...	...	...	...	...	...	...	...	...	...	No testing done in cadastrally surveyed area.

(a) Independent check lines in professionally-surveyed area.
(b) ,, ,, ,, extension survey.

(c) With superior officers in professionally surveyed area.
(d) ,, ,, extension area.

APPENDIX F.

Work Statement of Tahsildars for the year 1895-96.

Name of Tahsildar.	Name of tahsil.	District.	Subdivision.	Area cadastrally surveyed.												Area not cadastrally surveyed.								Area (in acres) found wrongly classed.			Remarks.
				Number of villages tested.	Number of mandals— Total number.	Whose papers examined.	Whose field-work tested.	Testing by check-lines. Number of lines.	Number of *kotans*.	Number of offsets.	Length of lines, in miles.	Area of fiscal village cultivation in 1 square miles.	Number of fiscal village miles per square mile of fluctuating cultivation.	Testing without check-lines. Number of fields tested.	Area, including jungle (in acres).	Number of villages tested.	Number of mandals— Total number.	Whose papers examined.	Whose field-work tested.	Total area, as shown by measurers, in acres.	Total area as shown by re-measurement, in acres.	Percentage of error.	Area of concealed cultivation discovered, in acres.	*Bastí*.	*Ser-lagat*.	*Bagit* shown as *Ser-lagat*.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Babu Nibaran Chandra Mukharji ...	Bijni ...	Goalpara ...	Dhubri ...	4	36	5	5	7	78	163	359	3,926	9·56	...	...	...	18	18	...	...	...	...	...	...	...	...	Independent lines in professionally surveyed area.
,, Banga Chandra Chaudhuri ...	Baleli ...	Kamrup ...	Barpeta ...	35	21	16	17	50	351	570	17·64	3,646·28	2·20	1,686	2,174·0	...	...	...	...	...	...	1	...	3	45	Ditto ditto.
,, Kesab Chandra Singh ...	Roha ...	,, ...	,, ...	37	17	11	11	93	628	1,292	32·00	6,564·62	3·21	189	4,841	8	4	2	2	407	422	3·55	12	...	...	Ditto ditto.
Muhammad Rozas Ali ...	Gauhati ...	,, ...	Gauhati ...	5	13	4	4	4	28	34	1·35	440	1·97	56	10·63	7	5	2	2	715·37	731·91	2·23	16·54	...	...	Ditto ditto.
Babu Shyamlal Chaudhuri ...	Palasbari ...	,, ...	,, ...	8	22	...	4	10	146	2·6	4·84	2,356	6·11	1,002	644·83	6	1	1	1	760·92	769·25	0·16	9·23	...	...	Ditto ditto.
,, Gangaram Das ...	Boko ...	,, ...	,, ...	19	23	23	9	15	222	115	11·21	6,358	1·15	8	1,218·41	15	7	7	7	632·78	729·30	15·30	109·52	...	...	Ditto ditto.
,, Ramakanta Barua ...	Patidarrang ...	,, ...	,, ...	15	20	9	9	24	255	194	6·95	1,340	3·59	1,689	1,217·54	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
,, Uday Chandra Barua ...	Hajo ...	,, ...	,, ...	26	33	10	10	26	432	326	12·98	8,146	1·50	463	727·97	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
,, Parsuram Das (Offg.) ...	,, ...	,, ...	,, ...	1		1	1	1	7	31	0·40			22	29·77	...	...	...	...	...	...	...	...	...	...	Independent lines in extension Survey area.
,, Bansidhar Barua ...	Nalbari ...	,, ...	,, ...	8	19	19	8	22	272	3·0	9·60	802	7·18	229	3,204·13	...	...	...	...	...	...	...	...	...	...	Independent lines in professionally surveyed area.
,, Jairam Deka ...	Tamulpur ...	,, ...	,, ...	3	17	...	1	...	...	...	...	1,237	...	240	476·66	...	...	...	...	...	...	...	28·75	...	...	Ditto ditto.
,, Chintram Das ...	Barma ...	,, ...	,, ...	13	18	12	6	23	229	4·6	13·34	2,108	4·06	1,054	2,189	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
,, Kaliram Chaudhuri ...	Chhaygaon ...	,, ...	,, ...	4	9	6	3	9	150	139	4·64	221	3·43	440	661	33	4	4	4	1,100	1,139	13	...	...	...	Ditto ditto.
,, Radha Nath Baroa ...	Baegia ...	,, ...	,, ...	15	26	21	12	39	210	262	29·71	2,337	5·62	70	2,093·21	...	...	...	...	...	...	...	...	...	...	18·35 Ditto ditto.
,, Sita Nath Sahariya ...	Mangaldai ...	Darrang ...	Mangaldai ...	11	12	10	8	7	54	134	1·40	1,174·80	0·62	321	339·50	5	3	3	3	903	907	44	...	...	...	Ditto ditto.
,, Dhanni Dhar Parua ...	Kalaigaon ...	,, ...	,, ...	10	24	24	6	1	12	8	0·75	7·35	0·23	97	62·96	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
,, Ravi Chandra Sarma ...	Tezpur ...	,, ...	Tezpur ...	18	10	10	8	13	58	84	4·20	570	4·80	87	69	5	6	6	2	78·33	82·18	4·68	1·81	...	...	Ditto ditto.
,, Sashi Ram Baruaha ...	Sadr ...	Nowgong ...	Nowgong ...	5	16	...	2	6	56	27	2·16	2,559	0·24	108	54	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
,, Chandra Kanta Baroa ...	Samaguri ...	,, ...	,, ...	9	13	13	7	4	23	60	1·25	2,424	2·33	256	309	3	1	1	...	...	...	...	...	...	...	Ditto ditto.
,, Rudra Nath Baroa ...	Roha ...	,, ...	,, ...	10	22	22	9	13	156	208	7·02	2,795	1·60	315	168	3	2	2	...	...	...	...	...	...	...	Ditto ditto.
,, Dandis Dhar Barua ...	Golaghat ...	Sibsagar ...	Golaghat ...	2	13	14	2	7	42	75	1·43	7,039	0·74	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
,, Guru Prasad Kakati ...	Athgaon ...	,, ...	,, ...	3	12	11	2	4	48	73	1·56	1,010	1·05	49	145	3	3	2	1	13	12	7·69	...	...	...	Ditto ditto.
,, Bishturam Baroa ...	Jorhat ...	,, ...	Jorhat ...	3	18	3	3	6	69	122	2·29	1,143	1·5	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
,, Damodar Datta ...	Namtichal ...	,, ...	Sadr ...	6	29	...	3	24	120	182	7·63	2,782	1·76	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
,, Durga Prasad Datta (Offg.) ...	,, ...	,, ...	,, ...	14		...	12	24	2·9	4·8	1·24		2·36	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
,, Durga Prasad Datta ...	Sibsagar ...	,, ...	,, ...	5	16	...	1	5	44	16	1·20	2,017	0·47	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
,, Someswar Saraa ...	,, ...	,, ...	,, ...	3		...	3	5	60	46	1·91		0·93	...	...	2	2	...	2	63·45	63·20	0·27	...	...	...	Ditto ditto.
Total	...	...	...	279	466	142	161	419	4,006	5,727	182·46	53,788·79	1·15	8,251	23,819·87	96	56	49	24	4,727·00	4,853·44	3·42	17·55	...	3	63·35	

APPENDIX G.

Work Statement of Mauzadars and Tahsil Muharrirs for the year 1895-96.

District.	Subdivision.	Total number of mauzadars and muharrirs who will key survey.	Area cadastrally surveyed.												Area not cadastrally surveyed.										Remarks.
			Number of villages tested.	Number of mandals.			Testing by chock-lines.						Testing without check lines.		Number of villages.	Number of mandals.			Total area in acres, as shown by mandals.	Total area in acres found by re-measurement.	Percentage error.	Area in acres of concealed cultivation discovered.	Area in acres found wrongly classed.			
				Total number.	Whose papers examined.	Whose field-work tested.	Number of lines.	Number of fences.	Number of offsets.	Length of lines in miles.	Area of fictitious cultivation in plots, in acres.	Number of linear miles per square mile of fictitious cultivation.	Number of fields.	Area, including jungle, in acres.		Total number.	Whose papers examined.	Whose field work tested.					Excess shown as		Deficit shown as
																							Regit.	*Farigani.*	*Regit* shown as *Farigani.*	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Goalpara ...	Dhubri ...	2	...	...	...	...	...	...	...	...	...	...	...	...	7	8	4	4	1,301	1'316	1·15	14	...	...	...	
Kamrup ...	Barpeta ...	7	32	22	19	20	71	677	892	32·77	9,659	2·17	193	243	65	8	8	8	3,687	3,688	0·03	...	...	...	...	
Darrang ...	Mangaldai ...	7	19	20	9	15	168	195	250	19·76	3,546	3·29	253	287	6	5	4	4	131	132	0·69	...	...	...	...	
Nowgong ...	Nowgong ...	6	43	60	37	30	35	461	679	16·93	13,340	0·61	1,263	1,572	7	5	5	4	39	121	...	...	...	...	...	
	Golaghat ...	1	8	4	3	3	11	81	100	4·03	216	11·25	79	2,200	1	1	1	1	33	33	...	0·01	...	...	...	
Sibsagar ...	Jorhat ...	7	18	28	25	18	19	182	294	6·03	2,867	1·09	218	164	6	4	3	3	60	63	8·33	...	...	...	...	
	Sadr ...	4	30	23	23	12	39	347	523	14·32	4,564	2·60	107	71	...	...	...	...	...	...	...	...	...	...	...	
Lakhimpur ...	North Lakhimpur	5	7	10	7	6	11	63	123	3·59	50·71	45·30	311	77·56	11	9	9	5	137·10	143·91	12·91	15	...	...	3·24	
Total ...	...	39	182	176	123	100	354	2,006	2,812	97·53	38,642·71	1·76	2,428	5,023·56	103	40	34	28	5,378·10	5,518·91	2·60	29·01	...	...	3·24	

APPENDIX H.

Statement showing the condition of Theodolite marks on 30th June 1895.

Subdivision.	Classification.	Total number (Cols. 4+7+8),	Total number found in good order by mandals.	Total number found not in good order by mandals.		Total of columns 4 and 5, or total in good order on 30th June 1895.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
Karimganj ...	(a) Prisms	224*	222	...	...	222	2
	(b) Earthen mounds	4,179†	1,124	801	2,204	1,925	50
	(c) Brick pillars on the boundaries of grants, &c.	152	145	...	7	145	...
	(f) Country stones on the boundaries of grants, &c.	97	95	...	...	95	2
	(f) *Pipes* on the boundaries of grants, &c.	52	43	...	9	43	...
	Total Karimganj	4,704	1,629	801	2,220	2,430	54
Barpeta ...	(a) Trijunction prisms	567	559	...	2	559	6
	(b) Theodolite stations shown by mounds and *simul* boughs.	5,197	1,891	2,810	324	4,701	102
	(c) Kanungos' mounds, including jungle mounds.	1,026	368	495	153	863	10
	(d) Prisms on boundaries of grants, &c.	253	253	...	...	253	...
	(e) Concrete blocks ditto ...	733	...	662	71	662	...
	(f) Country stones ditto ...	1,556	1,556	...	...	1,556	...
	(g) Mounds ditto ...	471	471	...	...	471	...
	Total Barpeta	9,803	5,098	3,967	630	9,065	118
Gauhati ...	(a) Trijunction prisms	2,908	2,804	35	21	2,839	48
	(b) Theodolite stations shown by mounds and *simul* boughs.	5,241	2,158	2,413	423	4,571	247
	(c) Kanungo's mounds, including jungle mounds.	3,136	1,584	1,381	138	2,965	83
	(d) Prisms on boundaries of grants, &c.	2,958	2,885	47	...	2,932	26
	(e) Concrete blocks ditto ...	1,579	1,220	359	...	1,579	...
	(f) Country stones ditto ...	6,328	6,326	1	...	6,327	1
	(g) Mounds ditto ...	4,290	4,129	143	16	4,272	2
	Total Gauhati	26,490	21,106	4,379	598	25,485	407

* Includes 124 prisms on boundaries of grants, &c.

† Includes 2,216 mounds on boundaries of grants, &c.

APPENDIX H—*continued.*

Subdivision.	Classification.	Total number (cols. 4+7+8).	Total number found in good order by mandals or patwáris.	Total number found not in good order by mandals or patwáris.		Total of columns 4 and 5, or total in good order on 30th June 1896.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
Mangaldai ...	(*a*) Trijunction prisms	1,508	1,497	...	...	1,497	11
	(*b*) Theodolite stations shown by mounds and *simul* boughs	6,673	3,912	2,627	52	6,539	72
	(*c*) Kanungos' mounds, including jungle mounds	110	91	19	...	110	...
	(*d*) Prisms on boundaries of grants, &c....	...	...	...	...	...	...
	(*e*) Concrete blocks ditto ...	...	...	...	...	...	...
	(*f*) Country stones ditto ...	...	...	...	...	...	...
	(*g*) Mounds ditto ...	...	...	...	...	...	...
	Total Mangaldai ...	8,291	5,500	2,646	62	8,146	83
Tezpur ...	(*a*) Trijunction prisms	332	196	133	2	329	1
	(*b*) Theodolite station shown by mounds and *simul* boughs	1,779	890	873	9	1,763	7
	(*c*) Kanungos' mounds, including jungle mounds	237	126	105	6	231	...
	(*d*) Prisms on boundaries of grants, etc.	...	...	...	...	...	...
	(*e*) Concrete blocks ditto ...	...	...	...	...	...	...
	(*f*) Country stones ditto ...	...	...	...	...	...	...
	(*g*) Mounds ditto ...	...	...	...	...	...	...
	Total Tezpur	2,348	1,212	1,111	17	2,323	8
Nowgong ...	(*a*) Trijunction prisms	2,113	1,562	514	37	2,076	...
	(*b*) Theodolite stations, shown by mounds and *simul* boughs ...	12,905	5,279	6,809	798	12,088	19
	(*c*) Kanungos' mounds, including jungle mounds	335	48	283	4	331	...
	(*d*) Prisms on boundaries of grants, etc.	467	457	7	3	464	...
	(*e*) Concrete blocks ditto ...	177	42	36	99	78	...
	(*f*) Country stones ditto ...	160	154	6	...	160	...
	(*g*) Mounds ditto ...	951	527	96	28	923	...
	Total Nowgong	17,108	8,369	7,751	969	16,120	19

APPENDIX H—*continued.*

Subdivision.	Classification.	Total number (6-4-7-48).	Total number found in good order by mauzadars or patwaris.	Total number found not in good order by mauzadars or patwaris.		Total of columns 4 and 5, or total in good order on 20th June 1893.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
Golaghat ...	(*a*) Trijunction prisms	519	483	25	11	508	...
	(*b*) Theodolite stations shown by mounds and *simul* boughs ...	5,750	2,811	1,696	1,210	4,507	33
	(*c*) Kanungos' mounds, including jungle mounds	74	62	12	...	74	...
	(*d*) Prisms on boundaries of grants, etc.	86	86	...	...	86	...
	(*e*) Concrete blocks ditto ...	584	584	...	...	584	...
	(*f*) Country stones ditto ...	...	...	...	...	...	...
	(*g*) Mounds ditto ...	322	285	...	37	285	...
	Total Golaghat	7,335	4,311	1,733	1,258	6,044	33
Jorhat ...	(*a*) Trijunction prisms	1,039	967	9	7	966	66
	(*b*) Theodolite stations shown by mounds and *simul boughs* ...	10,883	3,076	5,400	984	8,476	1,423
	(*c*) Kanungos' mounds, including jungle mounds	226	99	110	17	209	...
	(*d*) Prisms on boundaries of grants, etc.	...	...	...	...	...	...
	(*e*) Concrete blocks ditto ...	...	...	...	...	...	...
	(*f*) Country stones ditto ...	...	...	...	...	...	...
	(*g*) Mounds ditto ...	...	...	...	...	...	...
	Total Jorhat	12,148	4,132	5,519	1,008	9,651	1,489
Sibsagar Sadr ...	(*a*) Trijunction prisms	977	897	2	...	899	78
	(*b*) Theodolite stations shown by mounds and *simul* boughs ...	11,576	3,645	5,224	1,333	8,869	1,374
	(*c*) Kanungos' mounds, including jungle mounds	143	85	54	4	139	...
	(*d*) Prisms on boundaries of grants, etc.	...	...	...	...	...	...
	(*e*) Concrete blocks ditto ...	...	...	...	...	...	...
	(*f*) Country stones ditto ...	...	...	...	...	...	...
	(*g*) Mounds ditto ...	87	87	...	...	87	...
	Total Sibsagar sadr	12,783	4,714	5,280	1,337	9,994	1,452

APPENDIX H—*concluded.*

Subdivision.	Classification.	Total number (6+7+9).	Total number found in good order by mauzadis or patwaris.	Total number found not in good order by mauzadis or patwaris.		Total of columns 4 and 5, or total in good order on 30th June 1893.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
North Lakhimpur	(*a*) Trijunction prisms	191	191	...	...	191	...
	(*b*) Theodolite stations shown by mounds and *simul* boughs ...	1,551	...	1,485	66	1,485	...
	(*c*) Kanungos' mounds, including jungle mounds	45	...	43	2	43	...
	(*d*) Prisms on boundaries of grants, etc.	...	...	...	...	...	...
	(*e*) Concrete blocks ditto ...	...	...	...	...	...	...
	(*f*) Country stones ditto ...	...	...	...	...	...	...
	(*g*) Mounds ditto ...	...	...	...	...	...	...
	Total North Lakhimpur	1,787	191	1,528	68	1,719	...
Dibrugarh ...	(*a*) Trijunction prisms	366	365	...	...	365	1
	(*b*) Theodolite stations shown by mounds and *simul* boughs ...	2,941	877	1,507	548	2,384	9
	(*c*) Kanungos' mounds, including jungle mounds	98	58	40	...	98	...
	(*d*) Prisms on boundaries of grants, &c.	...	...	...	...	...	...
	(*e*) Concrete blocks ditto ...	...	...	...	...	...	...
	(*f*) Country stones ditto ...	...	...	...	...	...	...
	(*g*) Mounds ditto ...	...	...	...	...	...	...
	Total Dibrugarh	3,405	1,300	1,547	548	2,847	10
Total ...	(*a*) Trijunction prisms	10,713*	9,702	718	80	10,420	213
	(*b*) Theodolite stations shown by mounds and *simul* boughs ...	68,675†	25,663	31,645	8,031	57,308	3,336
	(*c*) Kanungos' mounds, including jungle mounds	5,480	2,521	2,542	324	5,063	93
	(*d*) Prisms on boundaries of grants, etc.	3,764	3,681	54	3	3,735	26
	(*e*) Concrete blocks ditto ...	3,256	2,022	1,057	177	3,079	...
	(*f*) Country stones ditto ...	8,193	8,174	7	9	8,181	3
	(*g*) Mounds ditto ...	6,121	5,799	239	81	6,038	2
	Grand total	106,202	57,562	36,262	8,705	93,824	3,673

* Includes 124 prisms on boundaries of grants, etc., in Pratabgarh.
† Includes 2,315 mounds on boundaries of grants, etc., in Pratabgarh.

APPENDIX I.

Statement showing Advances and Recoveries on account of Cadastral Survey operations during 1895-96.

District.	Advances made on account of	Outstanding on 31st March 1895.	Advances made during 1895-96.	Total for recovery on 31st March 1896.	Recovered during 1895-96.	Balance outstanding on 31st March 1896.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Cachar ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	19,605 9 8	12,747 13 2*	31,643 5 10	96 9 0	31,866 12 10
Sylhet ...	Protabgarh—					
	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	633 1 1	100 0 0	733 1 1	615 4 9	117 12 4
	Jointia—					
	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	15,879 1 6	...	15,879 1 6	345 3 1†	15,533 14 5
	(2) Demarcation of grants permanently settled and *lakhiraj* (revenue-free) estates—					
	(*b*) Prisms	1,019 11 0	...	1,025 11 9	1,811 11 11‡	283 15 10
	(*c*) Pay, etc., of demarcation kanungos.	906 0 0				
	Total	18,117 14 4	100 0 0	18,217 14 4	2,253 3 0	15,933 10 7
Goalpára ...	(1) Demarcation of theodolite stations in the District town.	...	127 8 0§	127 8 0§	...	127 8 0§
Kámrúp ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	28 1 10	759 8 0¶	783 9 10	647 1 10**	141 8 0
	(2) Demarcation of village trijunction points in the areas surveyed by local agency.	2,551 8 0	743 10 0	3,295 2 0	...	3,295 2 0
	(3) Demarcation of grants, *lakhiraj* (revenue-free) and *nisfkhiraj* (half revenue-paying) estates—					
	(*a*) Concrete blocks	25,518 2 3	1,259 5 0	27,050 7 3	153 8 0	26,910 15 3
	(*b*) Prisms	4,712 7 0	1,251 15 0	5,964 6 0	...	5,964 6 0
	(*c*) Pay, etc., of demarcation kanungos	...	618 2 2	618 2 2	...	618 2 2
	Total	32,834 3 1	4,884 8 2	37,578 11 3	802 9 10	36,933 1 5
Darrang ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	1,493 11 10	...	1,493 11 10	1,363 15 7	229 12 3
	(*c*) Demarcation of village trijunction points in the areas surveyed by local agency.	184 8 0	2 9 0	187 1 0	..	187 1 0
	(3) Demarcation of grants, *lakhiraj* (revenue-free) and *nisfkhiraj* (half revenue-paying) estates—					
	(*a*) Concrete blocks	1,795 4 3	4,049 6 3	5,844 10 6	...	5,844 10 6
	(*b*) Prisms	1,814 4 9	458 4 0	2,302 8 9	...	2,302 8 9
	(*c*) Pay, etc. of demarcation kanungos	...	227 10 8	227 10 8	...	227 10 8
	Total	5,317 12 10	4,737 13 11	10,055 10 9	1,363 15 7	8,721 11 2

* A further expenditure of Rs. 286 has been incurred by the survey party between the 31st March 1896 and the close of the season.

† Includes Rs. 324 10-4, the price of 81 prisms transferred to Cachar, and Rs. 6-8-9, the refund of the pay of a mahaarir cited as a witness.

‡ Out of this, Rs. 423 3-0 represents the price of 83 prisms transferred to Cachar.

§ Inclusive of Rs. 47-8-0 on account of price of 19 country stones in stock.

¶ Represents advances on account of the demarcation of the theodolite stations in Gauhati town.

** Includes Rs. 11-3-0 realised from the ryots of Gauhati, and Rs. 26-14-0 remitted as irrecoverable under the orders contained in the letter No. 14 Surveys—916R., dated the 12th March 1896.

APPENDIX I—*continued.*

District.	Advances made on account of	Outstanding on 31st March 1895.	Advances made during 1895-96.	Total for recovery on 31st March 1896.	Recovered during 1895-96.	Balance outstanding on 31st March 1896.
Nowgong ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	6,615 1 3	...	6,615 1 3	3,742 7 0	2,872 9 9
	(2) Demarcation of village *trijunction points* in the areas surveyed by local agency.	615 2 0	37 11 0	650 13 0	...	650 13 0
	(3) Demarcation of grants *lakhiraj* (revenue-free) and *nisf-khiraj* (half revenue-paying) estates—					
	(*a*) Concrete blocks	624 14 9	22 0 0	646 14 9	...	646 14 9
	(*b*) Prisms	166 5 6	56 11 7	723 0 9	..	723 0 9
	(*c*) Pay, etc., of demarcation kanungos	..	169 5 5	169 5 5	..	169 5 5
	Total	8,521 7 6	285 11 8	8,805 3 2	3,742 7 6	5,062 11 8
Sibsagar ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	8,304 13 2	.	8,304 13 2	7,805 10 11	749 2 3
	(2) Demarcation of village trijunction points in the areas surveyed by local agency.	1,332 4 0	70 10 0	1,403 2 0	.	1,403 2 0
	(3) Demarcation of grants *lakhiraj* (revenue-free) and *nisf-khiraj* (half-revenue paying) estates—					
	(*a*) Concrete blocks	5,799 3 8	2,305 0 6	8,104 10 2	23 0 9	8,081 9 5
	(*b*) Prisms	11,926 1 9	731 1 6	12,657 3 3	239 15 8	12,417 7 7
	(*c*) Pay, etc. of demarcation kanungos	39 0 0	1,321 5 11	1,321 5 11	..	1,321 5 11
	Total	27,883 0 7	4,328 1 11	32,081 2 6	8,068 11 4	24,012 7 2
Lakhimpur ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	1,000 14 0	...	1,000 14 0	1,000 14 0	*Nil.*
	(2) Demarcation of grants, *lakhiraj* (revenue-free) and *nisf-khiraj* (half revenue-paying) estates—					
	(*a*) Concrete blocks	..	1,518 0 9	1,518 0 9	49 7 0	1,468 9 9
	(*b*) Prisms	...	368 9 6	368 9 6	..	368 9 6
	Total	1,000 14 0	1,886 10 3	2,887 8 3	1,050 5 0	1,837 3 3
Total ...	(1) Demarcation of village trijunction points in the areas surveyed by the professional party.	53,359 6 4	13,725 12 2	67,086 2 6	15,467 2 6	51,618 15 10
	(2) Demarcation of village trijunction points in the areas surveyed by local agency.	4,686 10 0	872 8 0	5,559 2 0	...	5,559 2 0
	(3) Demarcation of grants permanently settled, *lakhiraj* (revenue-free) and *nisf-khiraj* (half revenue-paying) estates—					
	(*a*) Concrete blocks	33,765 14 11	9,414 12 6	43,180 11 5	237 15 9	42,942 11 8
	(*b*) Prisms	20,168 14 9	2,806 9 3	22,975 3 2	1,581 11 7	21,393 4 7
	(*c*) Pay, etc., of demarcation kanungos	631 0 0	2,806 8 2			
	Grand total	1,12,537 14 0	29,105 2 1	1,41,764 0 1	17,249 14 0	1,24,507 2 1

L

APPENDIX J.

Statement of Rainfall Stations and Instruments for the year 1895-96.

District.	Number of stations on 31st March 1896.			Number abolished during the year 1895-96.	Number added during the year 1895-96.	Number of stations on 31st March 1896.			Number of Government Instruments in the district on the 31st March 1896.				Remarks.
	Government.	Private.	Total.			Government.	Private.	Total.	Symon's gauges.	Measuring glasses.	Spirit levels.	5 inch measuring gauges.	
Cachar*	3	8	11	...	...	3	8	11	11	21	3	3	
Sylhet	5	7	12	...	...	5	7	12	11	27	1	...	
Goalpara*	6†	...	6	...	...	6	...	6	8	14	...	2	
Kamrup	11	5	16	...	...	11	5	16	16	32	...	...	
Darrang	3	10	13	...	...	3	10	13	13	26	4	...	
Nowgong	1	6	7	...	...	1	6	7	7	14	...	...	
Sibsagar*	3	8	11	...	...	3	8	11	11	21	...	...	
Lakhimpur	4	8	12	...	...	4	8	12	12	24	...	...	
Naga Hills	4	1	5	...	...	4	1	5	5	10	...	...	
Khasi and Jaintia Hills ...	3	1	4	...	...	3	1	4	4	8	...	1	
Garo Hills* ...	1	...	1	...	...	1	...	1	1	1	1	1	
Manipur	1	...	1	...	...	1	...	1	1	2	...	...	
North Lushai ...	2	...	2	...	...	2	...	2	3	5	2	2	
Total	47	54	101	...	...	47	54	101	103	205	11	9	

* The stations at the headquarters of these districts are under the direct management of the Meteorological Reporter to the Government of India.

† Revised figures.

ASSAM SECRETARIAT PRINTING OFFICE (REVENUE) NO. 177—358—1-9-96.

Remarks on the Report of the Department of Land Records and Agriculture, Assam, for 1895-96.

It is requested that any reply or future reference to this communication may quote its number, distinguishing letters, and date.

No. 263Agri.-R. 3923

FROM

THE OFFG. SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM,

To

THE OFFG. DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM.

Shillong, the 21st *September* 1896.

SIR,

I AM directed to communicate the following remarks of the Chief Commissioner upon your Report on the operations of the Department of Land Records and Agriculture, Assam, during the year 1895-96.

2. *Paragraphs* 2, 3, 4, *and* 5.—From these paragraphs, the Chief Commissioner observes that the officers holding the appointment of Director were on tour altogether for 190 days, and that the Superintendent of Land Records was on tour for 300 days. The Chief Commissioner is well satisfied with the amount of touring done and with the outturn of inspection work accomplished. The amount of touring done by Sub-Deputy Collectors was also, on the whole, very satisfactory. There is an improvement, as compared with previous years, in the record of touring by supervisor kanungos, and 24 out of 44 were on tour for more than 200 days, against only 14 out of 40 in 1894-95. The figures, however, are still hardly satisfactory, and steps should be taken to see that during the current year the minimum of 200 days on tour is worked up to in all cases. Sir William Ward agrees with you that more use might be made of the surveyor attached to the office of the Sub-Deputy Collector of the Kámrúp sadr subdivision; it is doubtful also whether the surveyor at Dibrugarh is fully employed. Gauháti and Dibrugarh are the only subdivisions in the Assam Valley in which officers of this class are entertained, and if a better outturn of work is not reported next year, it will be necessary to reconsider the question of retaining their services.

3. *Paragraph* 6.—The Chief Commissioner is glad to notice an improvement in the results attained at the Gauháti and Jorhát Survey Schools. As stated by you, however, it is desirable that more unpassed men from Sibságar sadr and Golághát should be sent to read in the Jorhát School, which was established not for Jorhát only, but for the district as a whole, the reason for locating it at Jorhát being merely that that place is the most convenient centre. The results of the Dibrugarh School are again unsatisfactory; but, as stated in paragraph 3 of Mr. Melitus' letter No. 201Agri.—3898R., dated the 20th September 1895, communicating the Chief Commissioner's remarks on the Report for 1894-95, the mandals of that district are exceptionally incompetent, and it is absolutely necessary to maintain the school. The Chief Commissioner is glad to notice that a first-class course has now been started both at Jorhát and Dibrugarh.

4. *Paragraph* 7.—The Chief Commissioner notices that 20 out of 27 tahsildárs (excluding three who are only officiating) have now passed in surveying, and that three have been exempted. It is also noticed that certain tahsildárs and tahsil muharrirs in the Surma Valley were given a training in surveying during the year. The report does not state what progress has been made in the direction of requiring tahsildárs in the Surma Valley to supervise the work of the *patwáris*. The system of maintaining the settlement records by the aid of *patwáris* has now been in operation for more than a year in the Jaintia Parganas, and the next report should show how far the two tahsildárs employed there have assisted in supervising them and testing their work. Sir William Ward desires that in all temporarily-settled tracts in the Surma Valley which have

been cadastrally surveyed, the tahsildárs should occupy, in regard to survey and settlement work, precisely the same position as is occupied by the tahsildárs of the Assam Valley districts.

5. *Paragraphs* 8 *and* 9.—It appears that out of 105 mauzadárs in the Brahmaputra Valley, 16 possess first-class and 34 second-class certificates; 9 have been exempted, and 46 are still liable to pass in surveying. Out of 952 mandals in the same valley, 185 hold first-class and 598 second-class certificates. This represents a considerable improvement as compared with last year. The causes which led to the improvement are not explained in the report, but the Chief Commissioner understands that it is due chiefly to the issue of certificates to men who did good work last cold weather with the professional party or in extension survey. The Chief Commissioner is glad to notice that out of 72 *patwáris* who have been appointed up to date in the cadastrally-surveyed portions of the Surma Valley, no less than 43 hold first-class, and 26 second-class, certificates. It is understood that all, or nearly all, these certificates have been granted on the results of training imparted by the professional party. The scale and pay of mandals serving in the Brahmaputra Valley have been revised since the close of the year, the total number of mandals employed being slightly reduced and the pay of the second and third grades increased by Re. 1 and Rs. 2 per mensem, respectively. The revised scale provides in all for 952 mandals, *viz.*, 188 in the first, 284 in the second, and 480 in the third grade. The actual numbers in each grade on the 1st April last were 122 in the first grade, 337 in the second, and 488 in the third grade. Excesses in the second grade are permitted to the extent of the vacancies in the first grade, and taking the two grades together, the number of mandals included in them amounted to very nearly the sanctioned strength. There are still a large number of vacancies in the first grade. The Chief Commissioner understands that this is due to the fact that a very high standard of excellence is required before a man is promoted to this grade; it is doubtful, however, whether the standard should be kept so high as to prevent 33 per cent. of the vacancies in that grade from being filled.

6. *Paragraphs* 13, 14, 16, 17, *and* 24.—The Chief Commissioner notices that in the Brahmaputra Valley, taking the inspections of the Director of Land Records and Superintendent of Land Records together, the work of 320 mandals and 18 supervisor kanungos was inspected three times during the year, that of 392 mandals and the remaining 22 kanungos twice, and that of the remaining 61 mandals once. These results are highly creditable; but, in view of the fact that the system of maintaining the cadastral records is now in good working order, and that a Superintendent of Land Records has been appointed for the express purpose of inspecting the work of the Land Records staff, Sir William Ward doubts whether it is still necessary for the Director to endeavour every year to inspect personally the work of all the kanungos and mandals in the Assam Valley districts. The area in the Surma Valley in which the system of maintaining the cadastral records has been introduced is rapidly increasing, and the Chief Commissioner is inclined to think that the Director might with advantage curtail his tours in the Assam Valley districts, and devote part of the time thus set free to inspecting in greater detail the work of the new staff which is being entertained in the Surma Valley, for which part of the province no Superintendent of Land Records has as yet been appointed.

The results of the Director's inspections, as noted in paragraph 13 of the report, show a further improvement in the efficiency of the Land Records staff in the Brahmaputra Valley, but it is observed that in most subdivisions much still remains to be done before the condition of the marks denoting theodolite stations can be considered satisfactory. At the same time, the Chief Commissioner is glad to see, from the statement given in paragraph 24, that the matter is not being lost sight of, and that out of 106,202 such marks, only 3,673 remained unvisited during the year, while of those visited, only 8,705 were found out of order and left unrepaired. It must, however, be remembered that these marks, consisting as they do, of mounds of earth surrounded by a bamboo gabion with *simul* trees planted on them, are always liable to damage, and much care will always be necessary in order to prevent them from disappearing.

The amount of inspection and testing done by Sub-Deputy Collectors was, on the whole, satisfactory.

7. *Paragraphs* 15 *and* 20.—The Chief Commissioner is glad to notice a marked increase in the inspections of mandals' work and field-testing carried out by Deputy Commissioners and Subdivisional Officers, but there is still room for much improvement. In all, district officers examined the papers of only 255 out of 773 mandals employed in the cadastrally-surveyed portion of the Brahmaputra Valley and tested the maps of only 54, the total length of check lines run to test these maps being 55·69 miles. In Nowgong, and in the two subdivisions, of the Lakhimpur district, no mandal's papers

were examined by the district officer, while in Tezpur sadr and Barpeta, out of 28 and 60 mandals in the cadastrally-surveyed area, the papers of only 8 and 4, respectively, were examined. No testing in the field was carried out by the Deputy Commissioner, Lakhimpur, or by his Subdivisional Officer, and in Kámrúp sadr, Mangaldai, Tezpur sadr, Nowgong, and Jorhát, field-testing was carried out in only 3, 4, 5, 2, and 3 mandals or circles, respectively. The officers concerned will be called upon to explain these unsatisfactory results, with reference to paragraph 6 of Mr. Melitus' letter already referred to, containing the Chief Commissioner's remarks on the Report for 1894-95, and the Chief Commissioner's Circular No. 55R., dated the 17th December 1895, communicating to Deputy Commissioners an extract from letter No. 3139—376-1, dated the 29th October 1895, from the Government of India, Revenue and Agricultural Department, in which it was laid down that district officers are primarily responsible for the proper maintenance of the records of their districts, and that, in respect of this branch of their work, the Director should stand to them in the position of an assistant, not of a substitute.

8. *Paragraphs* 18, 19, *and* 22.—There is a further improvement in the testing carried out by supervisor kanungos, but it is noticed that their supervision of the mandals' office work is still far from sufficient. As stated last year, the only remedy for this lies in closer supervision by the district officer and the Sub-Deputy Collector. At present, the tendency of Sub-Deputy Collectors is to stay too much at head-quarters during the rains, instead of visiting, as they should do, all the centres at which the mandals are collected for the preparation of their settlement papers, and seeing by personal inspection that the kanungos are testing the entries and area calculations in the manner and to the extent laid down in the rules. The attention of district officers will again be called to this subject.

Tahsildárs ran more check lines in the field than in the previous year, but their work in this respect is still far less than it should be. Their supervision of the office work of the mandals is still very defective, but it is hoped that the action which has recently been taken in accordance with the orders contained in paragraph 7 of the letter reviewing the Report for 1894-95, will result in a marked improvement in this respect.

9. *Paragraph* 23.—In your next report you should state somewhat more fully what progress is being made in getting into working order the system recently inaugurated for maintaining the settlement maps and records of the areas in the Surma Valley which have been cadastrally surveyed.

10. The Chief Commissioner has no special observations to make regarding the other portions of your report, except that he is glad to notice that the experiment of growing fruit trees in the North Cachar Hills is likely to prove successful. The desirability of planting out fruit trees in those Hills was pointed out by Sir William Ward when he visited the subdivision in December 1893.

I have the honour to be,

SIR,

Your most obedient Servant,

E. A. GAIT,

Offg. Secretary to the Chief Commissioner of Assam.

MEMO. No. $\frac{253\text{Agri.}}{3021}$ R.

Shillong, the 21st *September* 1896.

COPY, with a copy of the report, forwarded to the Commissioner, Assam Valley Districts, for information, special attention being invited to paragraphs 7 and 8 of the letter to the Director, Department of Land Records and Agriculture, Assam.

By order of the Chief Commissioner of Assam,

E. A. GAIT,

Offg. Secretary to the Chief Commissioner of Assam.

A. S. P. O. (Rev.) No. 177—400—22-9-96.

ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

FOR

1896-97.

BY

F. J. MONAHAN, Esq., I.C.S.,

OFFG. DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE.

CALCUTTA:

OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA,

1897.

CALCUTTA:
GOVT. OF INDIA CENTRAL PRINTING OFFICE,
8, HASTINGS STREET, CALCUTTA.

No. 3935.

FROM

F. J. MONAHAN, ESQ., I.C.S.,

Offg. Director, Department of Land Records and Agriculture, Assam,

To

THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Dated Shillong, the 20th September 1897.

SIR,

I HAVE the honour to submit the Fourteenth Annual Report giving an account of the operations of this Department for the year ending the 31st March 1897. The delay in its submission is due to the destruction of my office in the earthquake of the 12th June 1897, which resulted in the loss of many of the statements compiled for the purposes of the Report, the materials for which had to be collected afresh from District Officers.

I have the honour to be,

SIR,

Your most obedient Servant,

F. J. MONAHAN,

Offg. Director of Land Records and Agriculture, Assam.

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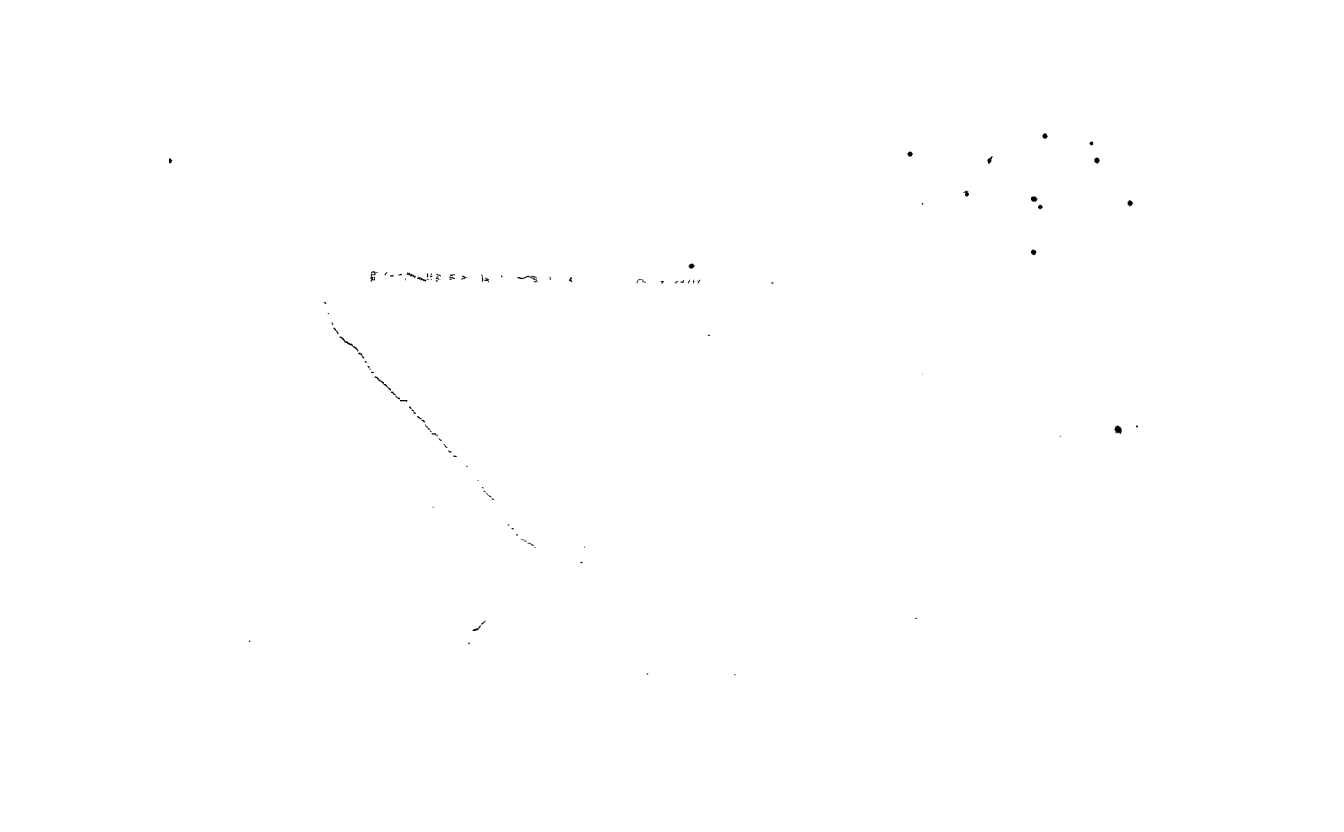
ASSAM



ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM,

FOR THE YEAR 1896-97.

CHAPTER I.

PREFATORY.

Introductory.

1. This report is drawn up in accordance with the instructions contained in the eighth of the series of resolutions issued by the Government of India in the Department of Revenue and Agriculture on the 20th March 1897.*

* Proceedings of the Government of India in the Department of Revenue and Agriculture (No. 3—39-1, dated Calcutta, the 20th March 1897).

Charge.

2. I assumed charge of the Department on the 1st April 1896 at Gauhati and retained it throughout the year.

Tours.

3. Between the 1st and the 24th April, I toured in the Barpeta sub-division of the Kamrup district, inspecting the Registrar Kanungo's office at Barpeta, and the papers of the supervisor kanungos and mandals of that sub-division. I also paid a flying visit to Bijni in the Goalpara district, and inspected the papers of some of the mandals of the Eastern Duars. On the 22nd July, I proceeded to Sylhet, where I inspected the Jaintia Settlement office, and made some enquiries with regard to the survey and settlement of *ilam* lands. I subsequently visited Cachar, where I inspected the Settlement office at Silchar, and the branch Settlement office at Katigara, and Karimganj, where I examined the Pratabgarh patwaris' papers, returning to Shillong on the 21st August. On the 29th October, I found it necessary to go again to Sylhet for the purpose of starting the *ilam* surveys, and took the opportunity of visiting Karimganj and Patharkandi, where I examined the work of the Pratabgarh patwaris in the field. I also paid a flying visit to Hailakandi in Cachar and inspected the branch Settlement office there. I returned to Shillong on the 25th November.

I started on my regular cold weather tour on the 1st December 1896 and proceeded from Gauhati by road to Golaghat, inspecting the work of the Land Records staff in the Nowgong district, and in the Golaghat sub-division. I also made special enquiries with regard to the causes of the decrease of the land revenue demand in Nowgong, and the condition and prospects of the crops in that district. Leaving Nigriting by steamer on the 31st December 1896, I proceeded *viâ* Goalpara to Bijni and Sidli and inspected the work of the mandals of Bijni tahsil, as well as the arrangements for the cadastral survey of Sidli Duar. I also made enquiries with regard to the proposed re-assessment of the land revenue of the Duar and inspected the road traffic registration station at Sidli. After visiting Dhubri, where I inspected the boat traffic registration station and conferred with the Deputy Commissioner of Goalpara on the subject of the survey and settlement of Sidli, I went by steamer to Maulvi Bazar inspecting on the way the boat traffic registration station at Bhairab Bazar.

In the latter part of January and the first part of February 1897, I inspected the progress of the survey of *ilam* lands in the South Sylhet and Karimganj sub-divisions, and then proceeded to Silchar, where I inspected the progress of settlement work. I met the Chief Commissioner on his arrival at Silchar on tour, and attended his inspection of the Cachar Settlement office. My cold-weather tour in the Surma Valley closed with a short visit to the Jaintia parganas, where I inspected the work

of the newly-appointed supervisor kanungos and patwaris, returning to Shillong on the 18th February. Between the 28th February and the 31st March 1897, I made a tour of inspection through the Mangaldai sub-division of the Darrang district and both sub-divisions of Kamrup, making special enquiries with regard to the causes of the falling off in the land revenue demand of those sub-divisions and inspecting the arrangements for the registration of frontier trade at Udalguri, Bengbari and Darranga.

In all I was on tour for 204 days during the year.

CHAPTER II.

LAND RECORDS ESTABLISHMENTS.

Supervisor kanungos.

4. The following statement shows the number of supervisor kanungos entertained in each grade, in each district at the close of the year under report and at the close of the preceding year, and compares the number actually entertained with the sanctioned scale for the province:—

NAME OF DISTRICT.	NUMBER OF SUPERVISOR KANUNGOS ACTUALLY ENTERTAINED ON THE 1ST APRIL 1896.			NUMBER OF SUPERVISOR KANUNGOS ACTUALLY ENTERTAINED ON THE 1ST APRIL 1897.			INCREASE OR DECREASE DURING THE YEAR.		
	First grade.	Second grade.	TOTAL.	First grade.	Second grade.	TOTAL.	First grade.	Second grade.	TOTAL.
Cachar	...	...	...	1	5	6	+1	+5	+6
Sylhet	...	4	4	...	4	4	...	...	...
Goalpara	...	...	...	...	1	1	...	+1	+1
Kamrup	5	9	14	4	10	14	−1	+1	...
Darrang	6	...	6	5	1	6	−1	+1	...
Nowgong	3	5	8	4	4	8	+1	−1	...
Sibsagar	3	6	9	1	8	9	−2	+2	...
Lakhimpur	3	...	3	3	...	3	...	...	...
Total for the Province	20	24	44	18	33	51	−2	+9	+7
Sanctioned scale for the Province	29	17	46	32	19	51	+3	+2	+5

The entertainment of four kanungos, three in the first and one in the second grade, to supervise the work of the patwaris appointed in the portion of the Cachar district surveyed in 1894-95 was sanctioned by letter No. 90 Survey—5161 R., dated the 4th December 1896, from the Secretary to the Chief Commissioner. Of these posts, one in the first grade has been given to the late Government surveyor of Hailakandi who received a training in cadastral survey with the Professional Party in 1895-96, and the remaining three to men who have served with credit as munsarims on the settlement staff, and who have been appointed, in the first instance, in the second grade.

The appointment of a kanungo of the second grade to supervise the maintenance of the land records in the portion of the Bijni tahsil of the Goalpara district, which was cadastrally surveyed by local agency in the seasons 1895-96 and 1896-97, was sanctioned by letter No. 272 P. S.—1936 G., dated the 13th March 1897, from the Secretary to the Chief Commissioner. For this appointment, a competent mandal of the first grade, who had been employed temporarily as assistant kanungo and employed in supervising the survey of the area in question, was selected.

Circles of supervisor kanungos.

5. The statement, Appendix I, shows the number of mandals' or patwaris' circles, and the total area comprised in each supervisor kanungo's circle. The average areas of supervisor

kanungos' circles in the Assam Valley, in Sylhet (Jaintia) and in Cachar are shown below.

Class of Officer.	Settled area, in bighas.						Unsettled waste, in bighas.			Total, in bighas.		
	Ordinary tenures.			Grants, permanently settled, lakhiraj or nisfkhiraj estates.								
	Assam Valley.	Sylhet (Jaintia).	Cachar.	Assam Valley.	Sylhet (Jaintia).	Cachar.	Assam Valley.	Sylhet (Jaintia).	Cachar.	Assam Valley.	Sylhet (Jaintia).	Cachar.
Supervisor Kanungos.	102,885	150,475	71,487	36,113	13,029	61,145	157,107	70,877	47,900	296,105	234,381	180,532

Grading and pay of mandals and patwaris; areas of their circles.

6. The following table shows the number and grading of mandals and patwaris in each district as they stood on the 1st April 1897, and compares the figures with those of the previous year and with the sanctioned scale :—

Name of District.	Sanctioned scale.				Number entertained on the 1st April 1896.				Number entertained on the 1st April 1897.				Increase or decrease during the year.			
	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.	First grade.	Second grade.	Third grade.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Cachar	12	19	30	61	...	...	11	11 (a)	...	...	60	60	...	...	+49	+49
Sylhet (Pratabgarh)	...	1	3	4	...	1	3	4	...	1	3	4	...	...	...	...
„ (Jaintia)	10	15	27	52	...	...	52	52	...	...	52	52	...	...	...	...
Goalpara	7	10	18	35	3	8	24	35	3	9	20	32	...	+1	—4	—3
Kamrup	59	88	149	296	34	126	135	295	32	115	148	295 (b)	—2	—11	+13	...
Darrang	28	42	70	140	25	56	58	139	24	55	60	139	—1	—1	+2	...
Nowgong	33	50	85	168	26	45	96	167	24	45	97	166	—2	...	+1	—1
Sibsagar	40	62	103	205	28	72	104	204	29	72	103	203	+1	...	—2	—1
Lakhimpur	21	32	55	108	6	30	71	107	6	38	63	107	...	+8	—8	...
Total	210	319	540	1,069	122	338	554	1,014	118	335	605	1,058	—4	—3	+51	+44

(a) Revised figures.
(b) Exclusive of the 5 mandals of Beltola paid by the mauzadar.

The entertainment of a staff of 45 patwaris, *viz.*, 9 of the first, 14 of the second and 22 of the third grade to keep up to date the maps and settlement records of the area of 495 square miles cadastrally surveyed in the Cachar district in the season of 1894-95 was sanctioned in letter No. 90 Survey—5161R., dated the 4th December 1896, from the Secretary to the Chief Commissioner. The men have all been appointed, in the first instance, in the third grade, and will receive promotion in due course, as they become qualified for it. Eleven of them had previously done satisfactory work as amins with the Professional Survey party, and the remaining 34 had undergone training in the survey classes conducted by officers of the party, and had received certificates of competence.

A reduction of the sanctioned scale of mandals in the Assam valley was brought into force from the 1st June 1896 simultaneously with the increase of the monthly rates of pay of mandals of the second and third grades from Rs. 9 and Rs. 6 to Rs. 10 and Rs. 8 respectively sanctioned in letter No. 1243—122-2, dated Simla, the 18th May 1896, from the Secretary to the Government of India in the Department of Revenue

and Agriculture. The scale now comprises 952 mandals, *viz.*, 188 in the first, 284 in the second and 480 in the third grade. The pay of patwaris of the second grade in the Jaintia parganas was increased from Rs. 9 to Rs. 10 a month under the sanction conveyed in letter No. 58 Survey—3706 R., dated the 1st September 1896, from the Secretary to the Chief Commissioner. Mandals and patwaris throughout the province are now paid at the same monthly rates, *viz.*, Rs. 12 in the first, Rs. 10 in the second and Rs. 8 in the third grade. Rules for the distribution of mandals' and patwaris' salaries were drafted by me during the year, and are now under the consideration of the Chief Commissioner. Although eight promotions of mandals to the first grade were sanctioned during the year, the number entertained in that grade at the end of the year was four less than at the end of the preceding year, owing to vacancies caused by deaths, etc., having been necessarily filled by appointments in the lower grades. The remarks contained in paragraph 3 of letter No. 253 Agri.—3923 R., dated the 21st September 1896, from the Secretary to the Chief Commissioner commenting on last year's report have been borne in mind, but some difficulty is found in filling up the vacancies in the first grade, owing to the fact that the most deserving mandals in the lower grades are often without first class certificates. Deputy Commissioners have been recommended to depute such men to the survey schools for a first class course of instruction, or to employ them on extension surveys in which they may qualify for the necessary certificate.

The statement below shows the average areas of mandals' and patwaris' circles in the Assam Valley, in Sylhet (Jaintia), and in Cachar.

Class of Officers.	Settled area, in bighas.						Unsettled waste, in bighas.			Totals, in bighas.		
	Ordinary tenures.			Grants, permanently settled, lakhiraj or naikhiraj estates.								
	Assam Valley.	Sylhet (Jaintia).	Cachar.	Assam Valley.	Sylhet (Jaintia).	Cachar.	Assam Valley.	Sylhet (Jaintia).	Cachar.	Assam Valley.	Sylhet (Jaintia).	Cachar.
Mandals or patwaris .	5,183	11,575	7,149	1,819	1,002	6,114	7,915	5,452	4,790	14,917	18,029	18,053

Qualifications of mandals, patwaris and candidates.

7. The following statement gives details as to the number of qualified mandals and patwaris and candidates for appointments on the land records staff in each district, and compares the figures with those of the preceding year :—

District.	Total number of mandals or patwaris on 31st March 1897.	Total number of mandals or patwaris supported on 31st March 1897.	Men with 1st class certificates on 31st March.				Men with second class certificates on 31st March.			
			Mandals or patwaris.		Candidates.		Mandals or patwaris.		Candidates.	
			1896.	1897.	1896.	1897.	1896.	1897.	1896.	1897.
Cachar	60	...	10	22	15	53	6	38	138	216
Sylhet	56	...	33	34	3	5	20	21	18	16
Goalpara	32	...	10	8	...	...	6	16	...	...
Kamrup	300	5	80	78	57	47	207	217	94	90
Darrang	139	6	19	24	1	3	104	103	31	23
Nowgong	166	...	29	29	1	1	110	102	12	17
Sibsagar	203	4	44	47	3	3	109	122	18	41
Lakhimpur	107	...	3	7	1	2	62	68	25	20
Total	1,063	15	228	249	81	114	624	687	336	423

On the 31st March 1897, 936 mandals and patwaris out of 1,063 employed in the province had qualified in surveying, as against 852 out of 1,024 on the 31st March 1896. The number of mandals and patwaris with first class certificates or equivalent qualifications had risen from 228 to 249. The total number of mandals and patwaris without any survey certificates was 112 (excluding 15 exempted from passing in surveying) against 154 (excluding 18 exempted) at the end of the previous year.

Survey Schools.

8. There are three survey schools in the province, one at Gauhati, one at Jorhat and one at Dibrugarh. In order to maintain the supply of recruits for the Land Records establishments in the Surma Valley, it will probably be necessary, before long, to open a fourth survey school at Sylhet or at Silchar. The following statement gives details as to the number of pupils passed by each school during the year, and the average cost per pupil :—

	Year.	Number of pupils who received first class certificates.				Number of pupils who received second class certificates.				Total passed.	Total cost of the school.	Total receipts.	Net cost.	Average net cost of each passed pupil.
		Munzadars.	Mandals.	Candidates.	Total.	Munzadars.	Mandals.	Candidates.	Total.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
											R a. p.	*R a. p.*	*R a. p.*	*R a. p.*
1895-96.	Gauhati	...	...	16	16	...	3	51	54	70	1,059 7 7	1,000 8 0	58 15 7	0 12 1
	Jorhat	...	...	...	...	...	7	17	24	24	563 11 0	284 8 0	279 3 0	11 10 1
	Dibrugarh	...	...	...	...	...	5	6	11	11	536 2 6	57 0 0	479 2 6	43 10 5
	Total 1895-96	...	...	16	16	...	15	74	89	105	2,159 5 1	1,342 0 0	817 5 1	7 12 7
1896-97.	Gauhati	...	...	17	17	...	4	67	71	88	1,210 7 0	1,031 0 0	179 7 0	2 0 8
	Jorhat	...	2	...	2	...	5	17	22	24	485 0 0	258 0 0	227 0 0	9 7 4
	Dibrugarh	...	...	...	...	...	3	12	15	15	574 12 6	110 0 0	464 12 6	30 15 9
	Total 1896-97	...	2	17	19	...	12	96	108	127	2,270 3 6	1,399 0 0	871 3 6	6 13 9

The Gauhati School continues to do good work. The number of pupils of the Jorhat School who passed the second class examination shows a falling off, which is unsatisfactory considering the great lack of trained mandals in the Sibsagar district. The Dibrugarh School shows a slight improvement. Two examinations for first class survey certificates were held by the Superintendent of Land Records at each school during the year, but two pupils only from the Jorhat School and none from the Dibrugarh School passed the examination.

Survey qualifications of Tahsildars and Munzadars.

9. Four tahsildars of the Brahmaputra Valley were examined in practical surveying by the Superintendent of Land Records under the provisions of Rule 7, Section IV, Chapter V of the Manual of Executive Rules, and all of them passed the required test. Of the 30 tahsildars in the province, 23 have now passed in practical surveying and four have been exempted.

The following statement shows the number of Assam Valley mouzadars who had qualified in surveying on the 31st March 1897 as compared with the figures of the preceding year :—

District.	Total number of mouzadars on 31st March 1897.	Number of mouzadars with first class certificates on 31st March		Number of mouzadars with second class certificates on 31st March	
		1896.	1897.	1896.	1897.
Goalpara	7	...	1	1	1
Kamrup	8	2	4	4	2
Darrang	13	2	5	5	3
Nowgong	19	6	5	2	2
Sibsagar	22	...	...	17	16
Lakhimpur	30	6	7	5	4
Total	99	16	22	34	28

Inspection by the Director of Land Records and Agriculture and the Superintendent of Land Records, Assam.

10. The statement below shows the number of mandals, patwaris, and supervisor kanungos whose papers were examined by the Superintendent of Land Records and myself in the course of our tours.

District.	Sub-division.	Total number of supervisor kanungos in cadastrally surveyed areas.	Number of kanungos whose work was inspected by		Total number of mandals in cadastrally surveyed areas.	Total number of mandals and patwaris whose work was inspected by		Remarks.
			Director of Land Records and Agriculture.	Superintendent of Land Records.		Director of Land Records and Agriculture.	Superintendent of Land Records.	
Kamrup	Barpeta	3	3*	3	61	60†	60	* Visited twice.
,,	Gauhati	11	10	11	210	131	188	† Of these, 11 were visited twice.
Darrang	Mangaldai	4	4	4	81	72	79	(a) Visited twice.
,,	Tezpur	2	...	2	31	...	28	(b) Of these, 49 were visited twice.
Nowgong	Nowgong	8	6	...	155	101	...	(c) Of these, 68 were visited twice.
Sibsagar	Golaghat	2	2	2(a)	52(g)	25	50(b)	(d) Of these, 61 were visited twice.
,,	Jorhat	4	...	4(a)	73(h)	...	71(c)	(e) Of these, 13 were visited twice.
,,	Sadr	3	...	3(a)	69	...	54(d)	(f) Of these, 23 were visited twice.
Lakhimpur	North Lakhimpur.	1	...	1(a)	20	...	15(e)	(g) Inclusive of 6 mandals of Abatguri.
,,	Dibrugarh	2	...	2(a)	29	...	24(f)	(h) Exclusive of 6 mandals of Abatguri.
Goalpara	Sadr (Bijni and Sidli).	1	...	1	13	13	13	(i) Of these, 4 were visited twice.
Sylhet	Jaintia and Fratabgarh.	4	4	...	56	29(i)	...	
	Total	45	29	33	850	431	592	

The Superintendent of Land Records was on tour altogether for 314 days during the year. In addition to the inspection work shown in the above statement, he devoted a portion of his time to the supervision of the special surveys which were carried out during the year by local agency in the Sadr sub-division of the Darrang district, in the Sidli Duar of Goalpara and in the *ilam* areas of Sylhet. Nowgong was not visited by him during the year as he inspected the work of the supervisor kanungos and mandals of that district at the end of the preceding year, and again at the beginning of the present year. The progressive expansion of the cadastrally surveyed area of the province, and the consequent strengthening of the subordinate Land Records staff have thrown on the Superintendent of Land Records a great increase of work in coping with which Mr. O'Donel continues to show the most praiseworthy industry. It is probable, however, that, to provide for the adequate supervision of the additional establishments of supervisor kanungos and patwaris, which have recently been and will shortly be entertained in the Surma Valley, the appointment of a second Superintendent of Land Records will before long become necessary.

A brief account of the results of the inspections of village maps and papers in each of the districts to which cadastral survey has been extended is given below.

Sylhet—Pratabgarh.—The four patwaris employed in this area are fairly efficient, but considerable irregularity in the methods of keeping up and recording changes in the settlement registers was noticed. Steps have, however, recently been taken to remedy these defects.

Jaintia.—The past field season was the first in which the patwaris of this area had been employed on their regular duties. In view of the short time which has elapsed since their appointment, the standard of their work may be considered fair. Some of the men who have received only preliminary training with the survey party, and have not actually worked as amins, have been found deficient in practical knowledge of surveying.

Goalpara.—The cadastral survey of an area of 131·73 square miles in the Bijni tahsil of the Eastern Duars was completed in 1896-97, and this area has recently been formed into a supervisor kanungo's circle. Thirteen mandals are employed in the tract. Their work was found fairly satisfactory, but it had not been sufficiently tested and examined by the supervisor kanungo in charge.

Kamrup.—In the Sadr sub-division the supervision of the mandals' work by the Sub-Deputy Collector and supervisor kanungos had been inadequate. The neglect to test crop entries and *faut ferur* entries was particularly noticed. On the other hand, there had been considerable improvement in the Barpeta sub-division, where the classification of lands in one tahsil had been carefully revised.

Darrang.—In this district, also, the supervision exercised by the kanungos had been insufficient, and the testing of crop entries had been much neglected, especially in the Mangaldai sub-division.

Nowgong.—The average standard of the mandals' work was found fairly good, but there are some very inferior mandals in the district. Much inaccuracy in the maps has resulted from neglect to test annually the limits of fields in places where the cultivation is fluctuating.

Sibsagar.—A large proportion of the mandals of this district are deficient in knowledge of surveying, and otherwise unfit for their appointments. The work of some of the supervisor kanungos also leaves much to be desired. A marked improvement was, however, noticed in the standard of the mandals' work in the Golaghat sub-division where it has hitherto been very inferior. This is chiefly due to the careful supervision exercised by the Sub-Deputy Collector, Babu Raj Kumar Rai.

Lakhimpur.—In the Sadr sub-division the annual testing of fields surveyed in previous years has been much neglected, and inaccurate methods of survey prevail to a considerable extent. The work of the Land Records staff in the North Lakhimpur sub-division was found creditable.

Touring and inspection by Sub-Deputy Collectors and probationers.

11. The statement below shows the number of days spent on tour by each of the Sub-Deputy Collectors and probationers for the appointment of Sub-Deputy Collector, who held charge of

sub-divisions during the year; details of the inspection work done by them are given in Appendix A.

Name.	Sub-division.	Number of days in charge.	Number of days on tour			Remarks.
			In cadastral mauzas.	In non-cadastral mauzas.	Total.	
Babu Purna Chandra Mitra, Sub-Deputy Collector.	North Sylhet	229	140	...	140	
Ditto ditto ditto	Karimganj	136	19	23	42	
Babu Tripura Charan Mukharji, Sub-Deputy Collector.	"	226	35	88	123	
Ditto ditto ditto	Dhubri	131	16	...	16	
Munshi Faizuddin Ahmed, Probationer	"	121	84	36	120	
Babu Rajvani Kanta Bardalai, Sub-Deputy Collector.	Barpeta	365	153	9	162	
Babu Bholanath Das, Sub-Deputy Collector	Gauhati	365	161	15	176	
Babu Jajneswar Das Gupta, Sub-Deputy Collector.	Mangaldai	365	124	26	150	
Babu Krisna Chandra Chandhuri, Sub-Deputy Collector.	Tezpur	365	166	15	181	
Babu Radha Mohan Das, Sub-Deputy Collector	Nowgong	365	153	18	171	
Munshi Didaruddin Borah, Sub-Deputy Collector.	Golaghat	26	18	...	18	
Babu Raj Kumar Rai, Sub-Deputy Collector	"	327	139	19	158	
" Radha Kanta Handiqui, Sub-Deputy Collector.	Jorhat	365	185	...	185	
Babu Rajkumar Rai, Sub-Deputy Collector	Sibsagar, Sadr	29	13	...	13	
Munshi Didaruddin Ahmed, Sub-Deputy Collector.	" "	326	121	...	121	
Maulvi Muhammad Sadir, Sub-Deputy Collector.	North Lakhimpur	273	72	20	92	
Munshi Mashiatullah, Sub-Deputy Collector	Dibrugarh	278	62	10	72	
Babu Hem Chandra Goswami, Probationer	"	87	36	20	56	

Babu Radhakanta Handiqui, Sub-Deputy Collector of Jorhat, spent the greatest number of days on tour—185. The amount of touring done by Munshis Didaruddin Ahmed and Mashiatullah who held charge of the Sadr sub-divisions of Sibsagar and Lakhimpur, respectively, and by Maulvi Muhammad Sadir who was in charge of the North Lakhimpur sub-division, for the greater part of the year, was insufficient. In the Mangaldai sub-division, Babu Jajneswar Das Gupta only just accomplished the minimum amount of touring prescribed by rule, which is not satisfactory, considering the importance of the sub-division.

Touring and inspection by supervisor kanungos and surveyors.

12. The touring and inspection work done during the year by the supervisor kanungos, and the two surveyors at Gauhati and Dibrugarh is shown in detail in Appendix B. The statement given below shows that the supervisor kanungos of 30 out of 51 circles were on tour for not less than 200 days, the minimum prescribed by rule. The Cachar kanungos will not enter upon their regular duties until the completion of the re-settlement of the district. Those employed in Sylhet (Jaintia) commenced ordinary inspection work in the field from the beginning of the last cold season. They may be expected to do the full amount of touring during the current year. In the Assam Valley, there has been some improvement under this head, and, in the districts of Nowgong and

Lakhimpur, and the sub-division of Barpeta, all the supervisor kanungos complied with the rule above referred to. The kanungos of the Mangaldai sub-division have all done a very insufficient amount of touring which is not creditable to the Sub-Deputy Collector, Babu Jagnesvar Das Gupta. The Government surveyor of Gauhati has done a little better in the year under report than in the preceding year, but does not yet render as much assistance to the Sub-Deputy Collector as might be expected of him :—

District.	Sub-division.	Name of circle.	Name of supervisor kanungo or surveyor.	Number of days in charge.	Number of days on tour.	Remarks.
Cachar	Hailakandi	Hailakandi	Benod Behari Chaudhuri	31	25	
,,	Sadr	Katigora I	Gopi Charan De	322	214	
,,	,,	Katigora II	Kamini Kumar De	31	...	
,,	,,	,,	Brajendra Kisor Das	231	111	
,,	,,	Jainagar	Brajendra Kisor Das	101	24	
,,	,,	Silchar	Sambhu Ram Das	31	...	
,,	,,	Chatila Haor	Dina Nath Ghose	29	6	
Sylhet	North Sylhet	Circle No. I	Sasi Kumar Kar	365	81	
,,	,,	,, II	Kamini Kumar De	365	104	
,,	,,	,, III	Abdus Sabur	365	120	
,,	,,	,, IV	Ambica Charan Banerjee	365	112	
Goalpara	Dhubri	Bijni	Rati Ram Das	365	181	
Kamrup	Barpeta	Bajali	Joy Ram Deka	308	204	
,,	,,	,,	Purnánanda (offg.)	57	18	
,,	,,	Barpeta	Basir Ali Biswas	268	148	
,,	,,	,,	Elios (offg.)	97	83	
,,	,,	Boha	Bhagirath Deka	305	204	
,,	,,	,,	Shib Nath	60	...	
,,	Gauhati	Beltola	Nityánanda	365	198	
,,	,,	Palasbari	Kan Nath	365	204	
,,	,,	Boko	Rang Deb	365	193	
,,	,,	Patidarrang	Bati Ram	193	119	
,,	,,	,,	Nar Nath	172	84	
,,	,,	Hajo	Jin Ram	339	182	
,,	,,	,,	Cheni Ram	26	22	
,,	,,	Barkhetri	Molan Chandra	365	207	
,,	,,	Barigog	Tita Ram	226	155	
,,	,,	,,	Dhaneswar (offg.)	139	45	
,,	,,	Pandúri	Mantan Ram	234	111	
,,	,,	,,	Lalit Ram Das (offg.)	131	61	
,,	,,	Nalbari	Santi Ram	281	210	
,,	,,	,,	Namal (offg.)	84	42	
,,	,,	Tambulpur	Jagat Ram	365	206	
,,	,,	Baroma	Madhab Ram	365	257	
Darrang	Mangaldai	Sipajhar	Chandra Kanta Sircar	305	111	
,,	,,	,,	Saru Ram (offg.)	60	28	
,,	,,	Mangaldai	Kalamani Das	216	43	
,,	,,	,,	Maniram Das (offg.)	149	78	
,,	,,	Kalaigaon	Jajna Ram Saharia	122	31	

District.	Sub-division.	Name of circle.	Name of supervisor kanungo or surveyor.	Number of days in charge.	Number of days on tour.	Remarks.
Darrang	Mangaldai	Kalaigaon	Ram Mal Das	139	98	
,,	,,	,,	Bahuram Das (offg.)	92	5	
,,	,,	Bengbari	Ram Mal Das	226	66	
,,	,,	,,	Baburam Das (offg.)	139	91	
,,	Tezpur	Western Circle	Durga Ram Datta	365	186	
,,	,,	Eastern Circle	Nandi Nath Sarma (offg.)	365	205	
Nowgong	Nowgong	Town	Uma Kanta Sarma (offg.)	30	16	
,,	,,	,,	Gajendra Narain Das (offg.)	235	116	
,,	,,	,,	Pua Ram Mohanta	100	73	
,,	,,	Silghat	Ram Rath Datta	365	221	
,,	,,	Doboka	Danpati Das	280	154	
,,	,,	,,	Tara Nath Bora (offg.)	86	79	
,,	,,	Roha	Sib Nath Sarma	365	226	
,,	,,	Dhing	Govinda Ram Datta	365	244	
,,	,,	Gerua	Gopal Chandra Goswami (offg.)	91	60	
,,	,,	,,	Surath Chandra Bora	274	152	
,,	,,	Ghugua	Lakhi Ram Das	265	146	
,,	,,	,,	Danpati Das	86	73	
,,	,,	Mayang	Titaram Gagai	143	66	
,,	,,	,,	Durgaram Das (offg.)	122	88	
,,	,,	,,	Gajendra Narain Das	100	78	
Sibsagar	Golaghat	Northern Circle	Manu Ram Talukdar	365	213	
,,	,,	Southern Circle	Pua Ram Mohanta	253	127	
,,	,,	,,	Bhakat Ram Datta	112	73	
,,	Jorhat	Eastern Circle	Bhola Ram Datta	365	201	
,,	,,	North-Western Circle.	Mahiram Das (senior)	365	193	
,,	,,	South-Western Circle.	Kati Ram Das	365	187	
,,	,,	Majuli	Mina Ram Das	365	226	
,,	Sadr	Eastern Circle	Sib Ram Borah	365	232	
,,	,,	Central Circle	Gobinda Nath Roy	356	189	
,,	,,	,,	Malbhog Gagai (offg.)	9	7	
,,	,,	Western Circle	Lalit Ram Chaudhuri	320	167	
,,	,,	,,	Trahi Ram Bairagi (offg.)	45	41	
Lakhimpur	North Lakhimpur.	North Lakhimpur.	Jagannath Deka	261	142	
,,	,,	,,	Bhabi Ram Rajkumar (offg.)	104	59	
,,	Dibrugarh	Dibrugarh	Maheswar Das	274	148	
,,	,,	,,	Janardan Sarma (offg.)	91	63	
,,	,,	Chabua	Lakhi Kanta Das	365	204	
Kamrup	Gauhati	...	Samudra Narain Das, Surveyor.	365	165	
Lakhimpur	Dibrugarh	...	Mazaffar Ali, Surveyor	306	142	
,,	,,	...	Chandreswar Chengkakoti, Offg. Surveyor.	59	51	

Inspection of the Land Records staff by District and Sub-Divisional officers.

13. Brief details of the inspection work done by Deputy Commissioners and Sub-Divisional officers are given in the following statements, full particulars will be found in Appendix C:—

I.—Inspections by Deputy Commissioners.

Name of Deputy Commissioner.	District.	Supervisor Kanungos.		Mandals.				
				In Cadastral area.			In Non-Cadastral area.	
		Total number.	Number whose work was inspected.	Total number.	Number whose papers were inspected.	Number whose maps were checked.	Total number.	Number whose work was inspected.
Captain P. R. T. Gordon	Kamrup	14	...	271	...	3	29	1
Lieut.-Col. M. A. Gray	Darrang	6	2	112	13	13	27	3
C. G. M. Kennedy, Esq.	Nowgong	8	6	155	91	8	11	3
F. C. Henniker, Esq.	Lakhimpur	3	...	49	...	...	58	1
	Total	31	8	587	94	24	125	8

II.—Inspections by Sub-Divisional Officers.

Name of Sub-divisional officer.	District.	Sub-division.	Supervisor Kanungos.		Mandals.				
					In Cadastral area.			In Non-Cadastral area.	
			Total number.	Number whose work was inspected.	Total number.	Number whose papers were inspected.	Number whose maps were inspected.	Total number.	Number whose work was inspected.
Babu Madhab Chandra Bardalai	Kamrup	Barpeta	3	...	61	18	11	9	6
D. H. Lees, Esq.	Darrang	Mangaldai	4	3	81	62	18	3	2
L. J. Kershaw, Esq.	Sibsagar	Golaghat	2	...	52	31	1	3	...
W. A. M. Duncan, Esq.	Ditto	Jorhat	4	3	73	25	1	4	...
B. C. Allen, Esq.	Ditto	Ditto		1		5	...		
F. E. Jackson, Esq.	Lakhimpur	North Lakhimpur	1	1	20	...	3	13	2
		Total	14	8	287	131	29	32	10

The falling off in the amount of inspection done by Deputy Commissioners and Sub-Divisional officers as compared with the preceding year is much to be regretted; as it is evident that the efficiency of the Land Records staff cannot be maintained by departmental supervision, without the co-operation of the district officers. In this respect, valuable assistance was rendered during the year under report by the Deputy Commissioners of Nowgong and Darrang and the Sub-Divisional officers of Barpeta, Mangaldai, Golaghat, and Jorhat. The Deputy Commissioner of Sibsagar did not inspect the work of any supervisor kanungo or mandal in his district. I understand that the Deputy Commissioner of Sylhet, Mr. O'Brien, inspected the papers of some of the patwaris of Jaintia and Pratabgarh, but he has not furnished details of his inspections.

Testing by the Director of Land Records and Agriculture and the Superintendent of Land Records.

14. The following statement shows the testing by check lines carried out by the Director of Land Records and the Superintendent of Land Records during the past two years; the length of check lines run by the latter officer was less than usual during the year under report, owing to the time which he had to spend in travelling, in order to inspect the *ilam* survey in Sylhet, and the extension survey in the Sidli Duar.

	Number of Check lines.		Number of Kafans.		Number of offsets.		Length of Check lines in miles.		Remarks.
	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.	
Director of Land Records and Agriculture.	14	17	194	183	251	272	7·82	10·14	In extension survey.
	7		120		150		4·40		In professionally surveyed area.
Total	21	17	314	183	401	272	12·22	10·14	
Superintendent of Land Records.	8	26	124	339	168	361	4·57	14·32	In extension survey.
	54	6	783	88	1,087	109	34·35	2·36	In professionally surveyed area.
Total	62	32	907	427	1,255	460	38·92	17·18	
GRAND TOTAL	83	49	1,221	610	1,656	732	51·14	27·32	

Testing by Sub-Deputy Collectors and probationers.

15. Full particulars of testing done by Sub-Deputy Collectors and probationers for the appointment of Sub-Deputy Collector will be found in Appendix D. Check lines run independently and those run with other officers have been shown separately. It will appear from the statement that the total length of check lines run by these officers during the year amounted to 771 linear miles as against 650 miles in the previous year. Excluding lines run in surveying waste land grants and testing the demarcation of special estates, the total length of check lines comes to 499 miles, or 22 miles less than in the preceding year.

Babu Jajnesvar Das Gupta, of Mangaldai, ran the greatest total length of check line—146·09 miles, but of this 104·56 miles were run in surveying waste land grants and in testing the demarcation of special estates. On the whole, the best outturn of testing is that of Babu Rajkumar Rai, Sub-Deputy Collector of Golaghat, who ran a total length of 85·20 miles of check line, of which 28·68 miles were run in testing mandals' current work. He also tested an area of 1,880 acres in the unsurveyed portion of the sub-division, and discovered 876 acres of concealed cultivation. Good outturns of check line run in testing current surveys are shown by Babu Radha Mohan Das (54·50 miles), Babu Krishna Chandra Choudhuri (47·02 miles), Babu Bhola Nath Das (44·69 miles), and Babu Rajani Kanta Bardalai (43·52 miles). The officer last named corrected the classification of 475 acres. Munshi Faizuddin Ahmed, probationer, tested thoroughly the extension survey carried out during the year in the Goalpara district with 74·24 miles of check line. The length of check line run by Munshi Didaruddin Ahmed during the year was very insufficient.

Testing by supervisor kanungos and surveyors.

16. The total length of check lines run by these officers during the year comes to 2,133·95 linear miles or 7·96 linear miles per square mile of fluctuating cultivation, as against 2,058·40 square miles in the preceding year. These figures are satisfactory on the whole, but there is a tendency on the part of supervisor kanungos to make up their outturn by running numerous lines in convenient localities, neglecting the tracts which are difficult of access or where there is much jungle, and in which errors of survey and concealed cultivation are more likely to occur. This practice should be checked by the Sub-Deputy Collectors. The length of check lines run during the year by the supervisor

kanungos of the Town, Silghat, Doboka and Mayang circles of Nowgong district, was less than it should have been.

17. The testing done by tahsildars is shown in Appendix F, and that of mauzadars and tahsil muharrirs in Appendix G. A fair amount of testing by check line was done during the year by the tahsildars of most tahsils in which there is much fluctuating cultivation, the outturn being especially good in some of the tahsils of the Kamrup district. As in the preceding year, the tahsildar of Samaguri in Nowgong shows a deficient outturn of check line, as does also the Sadr tahsildar of the same district. The total length of check lines run by tahsildars during the year comes to 201·42 miles as against 182·46 miles in the preceding year. The duty of testing entries in the mandals' papers without check lines should not have been neglected by the tahsildars of the Sibsagar and Lakhimpur districts, in whose jurisdictions there is not much fluctuating cultivation.* The naib tahsildar of the Sadr tahsil of the Jaintia parganas took a proper share in the supervision of the patwaris' work, testing surveys in 13 villages, examining the papers of 11 patwaris, and running 7·67 miles of check line. The naib tahsildar of the Kanairghat tahsil in which there is very little new cultivation to survey, did not run any check lines, but is said to have generally supervised the work of the patwaris. Check lines run during the year by mauzadars and tahsil muharrirs aggregate 147·35 miles against 97·53 miles in the preceding year, there having been an improvement under this head in all sub-divisions except Sibsagar Sadr where there is a slight falling off, and Lakhimpur Sadr where no testing has as yet been done by officers of the classes referred to, in the cadastrally surveyed area. In the sub-division last named the mandals are particularly backward, and their work requires more attention from land revenue officers of all grades than it has hitherto received.

Testing by tahsildars, mauzadars and tahsil muharrirs.

18. The testing carried out during the last two years by District and Sub-Divisional officers is shown in the following statement:—

Testing by Deputy Commissioners and Sub-Divisional officers.

District.	Sub-division.	Testing by Check Lines.						Testing without Check Lines.			
		Total area surveyed up to		Total area of fluctuating cultivation.		Linear miles of check lines run.		Total area unsurveyed in		Area tested.	
		*1895-96.	†1896-97.	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.
1	2	3	4	5	6	7	8	9	10	11	12
		Sq. miles.	Sq. miles.	Acres.	Acres.			Sq. miles.	Sq. miles.	Acres.	Acres.
Goalpara	Dhubri	55·54	131·73	3,936	4,485	6·47	..	2,238·46	2,252·27	...	...
	Goalpara	...	...	...	...	...	...	1,570·00	1,570·00	...	...
Kamrup	Barpeta	518·06	543·22	19,869·36	19,834·13	10·71	8·19	707·94	677·78	327	73·13
	Gauhati	1,420·43	1,429·43	28,624	30,052	2·95	2·98‖	987·06	987·06	...	46
Darrang	Mangaldai‡	708·36	721·33	8,947	8,248	5·72	3·27	555·43	551·96	...	26·40
	Tezpur§	202·72	221·47	3,434	6,671	5·10	6·67¶	1,939·04	1,910·29	...	...
Nowgong	Nowgong	1,067·16	1,106·39	39,936	44,103	1·85	2·86	2,173·29	2,152·06	...	...
Sibsagar	Golaghat	341·81	348·66	6,927	8,635	10·62	0·66	573·19	566·34	...	...
	Jorhat	677·65	677·65	5,377	8,328	2·14	1·57	240·36	240·36	40	...
	Sadr	673·23	683·30	9,153·77	9,333·03	3·52	...	316·77	306·20	...	...
Lakhimpur	North Lakhimpur.	80·06	83·61	1,271·73	2,305·48	...	1·28	1,080·94	1,077·39	...	15·53
	Dibrugarh	189·19	215·19	1,987·43	2,253·75	6·61	...	2,373·81	2,347·31	512·94	11·65
Sylhet	South Sylhat	...	...	...	...	...	(a)0·63	...	...	...	...
	Karimganj	...	...	...	...	...	(a)1·49	...	...	...	...
	Total	5,954·23	6,171·63	116,243·79	144,247·39	55·09	29·59	14,857 19	14,640·42	839·94	172·71

* This excludes the area surveyed by local agency in different districts during the year 1895-96.
† Do. do. do. do. 1896-97.
‡ Revised figures.
§ Do. do.
‖ Of these 1·31 miles were run by the Assistant Commissioner of Gauhati.
¶ Do. 4·20 do. do. do. do. do. Tezpur.
(a) Run in *Rabi* survey.

The total length of check lines run by these officers in 1896-97 was 29·59 miles, or a little more than half the outturn of the preceding year—a result which cannot be considered satisfactory. As in the previous year, the greatest length of check line (8·19 miles) was run by Babu Madhab Chandra Bardalai, the Sub-Divisional officer of

Barpeta, who takes great interest in Land Records work. Useful testing was also done by Colonel Gray, Deputy Commissioner of Darrang, Mr. Kennedy, Deputy Commissioner of Nowgong, Mr. Colquhoun, Assistant Commissioner of Tezpur, and Mr. Lees, Sub-Divisional officer of Mangldai. The Deputy Commissioners of Sylhet, Goalpara, Sibsagar and Lakhimpur ran no check lines during the year.

Year.	Length of check lines, in miles.	Area tested without check lines, in acres.	Year.	Length of check lines, in miles.	Area tested without check lines, in acres.
1887-88	...	2,954	1892-93	18·25	448
1888-89	8·57	2,659	1893-94	12·77	527
1889-90	1 84	3,539	1894-95	29·41	254
1890-91	...	1,486	1895 96	55·69	840
1891-92	7 29	390	1896-97	29·59	173

Figures showing the testing carried out by Deputy Commissioners and Sub-Divisional officers during the past ten years are given in the margin.

19. In the following statement the total amount of testing done by means of check lines in the cadastrally surveyed area of each sub-division is compared with the total area of fluctuating cultivation.

Total testing done.

District.	Sub-division.	Number of linear miles per square mile of fluctuating cultivation.				
		By Director of Land Records and the staff under his immediate control.	By Sub-Deputy Collectors.	By Supervisor Kanungos.	By Tahsildars, Mauzadars, etc.	By District and Sub-Divisional Officers.	Total.
Sylhet	North Sylhet (Jaintia)	...	1·67	31·40	...	...	33·07
Goalpara	Dhubri	...	1·07	7·22	0·47	...	8·76
Kamrup	Barpeta	·0006	1·30	6·93	2·35	0·26	10·8406
	Gauhati	...	0·93	9·42	1·33	0·04	12·22
Darrang	Mangaldai	00·3	2·71	11·95	3·34	0·25	18·78
	Tezpur	...	4·39	8·61	1·22	0·51	15·43
Nowgong	Nowgong	0·06	0·63	6·15	0·45	0·04	7·32
Sibsagar	Golaghat	0·04	2·03	4·82	0·69	0·06	7·69
	Jorhat	...	1·39	10·66	1·04	0·11	13·20
	Sadr	·001	1·39	8·17	2·20	...	11·761
Lakhimpur	North Lakhimpur	...	3·64	13·18	0·52	0·37	17 71
	Dibrugarh	...	1·47	8·94	0·25	...	10·66

20. The information furnished under this head by Deputy Commissioners is not complete, but it appears that more attention was paid to the subject in most districts, than in the preceding year. The Deputy Commissioner of Goalpara reports that the tahsildar of Bijni tahsil tested the office work of 7 out of the 16 mandals employed in his jurisdiction. In Kamrup the tahsildars, mauzadars and tahsil muharrirs did useful work in testing area and revenue calculation, comparing pattas and entries in the *dág chithas* with the *jamábandis*, and the mandals' abstract books with the *dág chithas* and *jamábandis*, and in checking corrections made in accordance with mutation and other orders of the Revenue Courts. In Nowgong the tahsildars of Samaguri and Roha and the mauzadar of Nij Tetelia checked the office work of their mandals to a small extent, but the Sadr tahsildar and the other mauzadars of the district rendered no assistance in this direction. In Darrang the two tahsildars of the Sadr sub-division and the mauzadars of Gahpur and Bargaon supervised the preparation of settlement papers to a satisfactory extent; the mauzadar of Balipara and the tahsildars and mauzadars of the Mangaldai Sub-division appear to have taken little interest in this work.

Supervision of mandals' office work by tahsildars and mauzadars.

In the Sadr sub-division of the Sibsagar district, the two tahsildars, and the mauzadars of Silakuti and Hahchora inspected the office work of the mandals subordinate to them, their examination being confined mainly to the checking of the figures in

the annual *dág chithas* and *jamábandis*, and in the Jorhat sub-division similar inspection was carried out by the tahsildar and one tahsil muharrir and by all the mauzadars. In the Golaghat sub-division, the tahsildar of Athgaon tahsil tested 20 per cent. of the calculations of area of new fields, and 20 per cent of the revenue calculations and page totals in the *jamábandis*, and three of the mauzadars tested the office work of the mandals subordinate to them to an adequate extent; but it appears that this duty was neglected by the tahsildar of Golaghat, and the other mauzadars of the sub-division. In the Sadr sub-division of Lakhimpur the Sadr tahsildar, and the mauzadars of Rohmaria and Gharbandi inspected the office work of all the mandals subordinate to them, while engaged in preparing the papers for the regular settlement, and the mauzadars of North Lakhimpur sub-division made similar inspections in the case of a few mandals.

Registrar Kanungos.

21. The Registrar Kanungos' offices at Sylhet (Jaintia), Barpeta, Gauhati, Nowgong, Mangaldai and Golaghat, and the office of the Assistant Registrar Kanungo at Karimganj (Pratabgarh) were inspected by me during the year. These offices were found in good order, and considerable improvement was observed in the method of carrying out corrections in the periodic *jamábandi*, in accordance with orders passed in mutation cases. A circular (No. 7, dated the 27th June 1896 of this Department) was issued by me during the year prescribing in detail the entries to be made in the different columns of the register when giving effect to such orders, and the procedure therein laid down is now being generally followed. The work of communicating to tahsildars and mauzadars and supervisor Kanungos the corrections to be made in the second copy of the *jamábandi*, and in the *dág chithas* was found to be still considerably in arrears in all the sub-divisions except Barpeta, where it is comparatively light. A form of *parwana* to be issued to the officers referred to, which will have the effect of greatly expediting this business, has been prescribed by the Chief Commissioner's Circular No. 65 R., dated the 4th December 1896, but had not yet been brought into use when my inspections were made.

Form of mutation orders.

22. Much of the difficulty which has hitherto been experienced in keeping the record-of-rights up to date has been due to the vagueness of the orders sometimes passed by revenue courts in mutation cases. With a view to remedying this defect, a circular* was issued during the year containing instructions on the procedure to be followed in disposing of such cases, and prescribing a form of final order to be used in cases in which mutation is sanctioned. It is hoped that the observance of this circular, and the use of the *parwana* referred to in the preceding paragraph, will enable the effect of such orders to be clearly shown by corrections made in the settlement papers in future.

* Chief Commissioner's Circular No. 62 R., dated the 3rd December 1896.

Condition of survey marks.

23. The condition of survey marks as reported by the district authorities is shown in the statement, Appendix H; an abstract is given below.

	Classification.	Total number (columns 6+7+8).	Total number found in good order by mandals or patwaris.	Total number found not in good order by mandals or patwaris.		Total of columns 4 and 5 or total in good order on 30th June 1896.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
Total for the province.	(*a*) Trijunction prisms	11,081	10,236	652	119	10,888	74
	(*b*) Traverse stations shown by mounds and *simul* boughs.	70,755	28,713	29,978	8,631	58,691	3,433
	(*c*) Kanungo's mounds, including jungle mounds.	6,592	3,402	2,884	503	6,286	103
	(*d*) Prisms on boundaries of grants.	4,835	4,725	62	43	4,785	7
	(*e*) Concrete blocks on boundaries of grants, etc.	8,883	7,291	1,332	260	8,623	...
	(*f*) Country stones on boundaries of grants, etc.	8,957	8,869	27	50	8,896	11
	(*g*) Mounds on boundaries of grants, etc.	2,925	2,419	172	315	2,591	19
	TOTAL	114,528	65,653	35,107	9,921	100,760	3,647

The condition of survey marks seen during the year by the Superintendent of Land Records and by Sub-Deputy Collectors is shown below :—

District or sub-division.	Inspected by Superintendent of Land Records.			Inspected by Sub-Deputy Collector.			Total number inspected.		
	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.	Total number examined.	Number with living trees.	Percentage with living trees.
Karimganj	...	...	...	160*	129	80·62	160	129	80·62
Dhubri	52†	50	96·15	1,147	1,134	98·86	1,199	1,184	98·74
Barpeta	...	...	...	319*	243	76·17	410	324	79·02
				91†	81	89·01			
Gauhati	...	...	...	381*	331	86·87	638	540	84·63
				257†	209	81·32			
Mangaldai	42*	42	100·00	784	771	98·34	849	836	98·46
	...	...	...	23†	23	100·00			
Tezpur	70*	64	91·42	328	326	99·39	502	480	95·61
	47†	33	70·21	57	57	100·00			
Nowgong	...	...	...	1,152*	805	69·88	1,238	846	68·33
				86†	41	47·68			
Golaghat	261*	226	86·59	423	281	66·43	742	551	74·25
	20†	18	90·00	38	26	68·42			
Jorhat	282*	241	85·46	726	600	82·64	1,023	850	83·08
	...	...	...	15†	9	60·00			
Sibsagar Sadr	303*	268	87·01	522	296	56·70	891	611	68·57
	30†	16	53·33	31	31	100·00			
North Lakhimpur	98*	91	92·85	389	353	90·74	504	461	91·46
	...	...	...	17†	17	100·00			
Dibrugarh	70*	62	88·57	37	30	81·08	579	534	92·22
	20†	1	5·00	452	441	97·57			
Total	1,300	1,112	85·53	7,435	6,234	83·84	8,735	7,346	84·09

* In professionally surveyed area.
† In extension survey area.

Advances and recoveries on account of demarcation.

24. The statement, Appendix J, shows the advances and recoveries made up to the 31st March 1897 and the balance outstanding on that date on account of demarcation in connection with cadastral survey operations in each district. These advances have been grouped under the same heads as in last year's report. With the exception of a small sum remaining for recovery in the districts of Kamrup, Nowgong and Darrang, and in the Jaintia parganas of Sylhet, the amounts outstanding under the head "(1) Advances recoverable from landholders" consist of advances made in Cachar which will be recovered when the district is resettled, or for demarcation of theodolite

stations in the towns of the Assam Valley, which has been recently completed or is in progress. There has been some unnecessary delay in carrying out the demarcation of trijunction points in the areas surveyed by local agency up to and including the season of 1893-94, and the work had not been completed in any district up to the close of the year. It has since, however, been finished in the district of Kamrup and is approaching completion in other districts, and steps are now being taken for the recovery of advances under head (2) from the landholders of the areas referred to. The prisms required for the demarcation of triple junction points in the areas surveyed by local agency during the seasons 1894-95 and 1895-96 were procured during the year. Under the third head "Advances for demarcation of grants, permanently settled Lakhiraj, and Nisfkhiraj estates," the bulk of the advances made on account of the Jaintia parganas have already been recovered, and the amount still outstanding there is due on account of some permanently settled land which is the subject of dispute. Steps are being taken for the recovery of these advances in the districts of Kamrup and Sibsagar where the demarcation of the estates referred to has been completed. In the Nowgong and Darrang districts, it has been almost finished, but in Lakhimpur a good deal of the work remains to be done.

CHAPTER III.

Utilization of Land Records.

Introduction of the system.

25. The efforts of this Department have hitherto been directed chiefly to the organization of the Land Records system of the province, and until considerable progress had been made in that work it was necessary to postpone the utilization of the Land Records agency for the purpose of collecting agricultural information. A first step was taken in this direction during the year by the issue of a circular (No. 2, dated the 22nd March 1897), prescribing weekly reports to be submitted by supervisor kanungos on the state and prospects of the crops, and the progress of agricultural operations in their respective circles.

Occasional failure.

In the same circular District Officers were requested to direct the mandals and patwaris serving under them to submit special reports on the occurrence in their circles of calamities, such as serious damage to crops by insects, blights, hailstorms or floods, or serious outbreaks of cattle disease. A rule to this effect has recently been added to the rules for the maintenance of settlement maps and records, in accordance with the orders contained in letter No. $\frac{176 \text{ Agri.}}{2248}$ R., dated the 1st June 1897, from the Officiating Secretary to the Chief Commissioner to my address.

Gradual and persistent failure.

This letter also communicated the Chief Commissioner's decision to postpone the introduction of a "circle book" and the systematic investigation of gradual and persistent causes of failure until the appointment of an Assistant to the Director of Land Records, one of whose duties it will be to suggest, after such preliminary enquiry as might be necessary, what facts and statistics should be selected for record in the circle book. The officer selected for the post of Assistant Director is expected to join it shortly, and will commence his enquiries during the ensuing cold weather.

CHAPTER IV.

Scientific and National Enquiry under Imperial Control.

Meteorology.

26. There was no change in the system of rainfall registration during the year. The number of registering stations in the province at the close of the year was 103 against 101 at the close of the preceding year. A separate report on rainfall registration has been submitted, in accordance with the orders conveyed in letter No. $\frac{965 \text{ Mis.}}{781}$ R., dated the 11th March 1897, from the Officiating Secretary to the Chief Commissioner.

27. At the instance of the Reporter on Economic Products to the Government of India specimens of the following articles for the Index Collections of the Imperial Institute and Indian Museum were forwarded to him:—

Economic Products—Index Collection.

Dichopsis polyantha	Gum and flowers.
Elæocarpus ganitrus	Seeds.
Laportea cremelata	Fibre and seeds.
Lillium giganteum	Leaves.
Livistona jenkinsiana	Leaves, umbrellas, hats.
Melodinus monogynus	Fibre and bark.
Mesua ferrea	Fruit, bark, root, leaves, flowers, seeds and oil.
Mucuna pruriens	Seeds and roots.
Nyctanthus arbortristis	Flowers and leaves.

Enquiries were made with a view to procuring specimens of thirteen other articles required for the Index Collections.

Samples of the following articles were forwarded for the Commercial Collection of the Imperial Institute:—

Commercial Collection.

Dyes and Tans—	
Bixa orellana	Seeds, pods, bark and dyed stuffs.
Morinda citrifolia	Roots.
Rubia khasiana	„

A collection of dyeing materials and dyed stuffs illustrating the monograph on dyes and dyeing in Assam by Mr. W. A. M. Duncan, I.C.S., which was issued during the year, was forwarded to the Reporter. Botanical specimens of some of the dye-producing trees and plants mentioned in the monograph, which had not been scientifically identified at the time of its issue, were also sent to him for identification.

Fibres—	
(*a*) Textile fibres.	
Boehmeria nivea—(Rhea)	Stems and fibres.
(*b*) Materials for braids, etc.	
Æschynomene aspera—(Sola pith)	Mats and ornaments.
Food substances, etc.—	
Coix Lachryma—(Job's Tears)	Grain and necklace.
Euryale ferox	Seeds.
Perilla ocimoides	(Khasi, Unei—Naga, Kenia)—seeds and oil.
Timbers—	
Lagerstrœmia parviflora	Timber.

With a view to the preparation of a hand book on Rhea a special enquiry was instituted during the year with regard to the varieties of the plant cultivated in the province, the methods of cultivation and preparation of the fibre, and the outturn obtained. At Dr. Watt's request letters asking for a report on these points were issued to District officers, and the reports received, together with botanical specimens of rhea from different districts, were forwarded to him. In the course of my tours in the Assam Valley further enquiries with regard to the methods of cultivating and preparing rhea followed by the Assamese cultivators were made by me personally, and in March 1897 Dr. Watt paid a visit to the Valley for the purpose of completing his investigation. Requisitions for rhea roots for experimental cultivation by the Forest Department, and rhea seeds for the Government of New South Wales were also complied with.

Rhea.

In April 1895 some specimens of the leaves of Tezpat (*Cinnamomum tamala* „ *var intermedium*), which are an important article of trade in the Khasi and Jaintia Hills and parts of Sylhet, were forwarded by Mr. Gait, the permanent Director of this Department, to the Reporter on

Tezpat.

Economic Products for identification, and subsequently, at his request, information was collected with regard to the cultivation of the tree, and the trade in its products in different parts of the province. These enquiries were continued during the year under report and botanical specimens and trade samples (leaves and bark) of the tree were forwarded to Reporter by whom a number of the Agricultural Ledger Series dealing with the subject was issued in December 1896.

Agar.

At Dr. Watt's request, a copy of a note on the method of preparing paper from the bark of the Agar or Sachi tree (*Aquilaria Agallocha*) by Babu Phanidhar Chaliha, Sub-Deputy Collector, was forwarded to him. Specimens of the wood and resin of the tree, as well as of the raw bark and of bark prepared as a writing material, were supplied from the Sibsagar district and specimens of the wood, resin and raw bark from Sylhet.

Grewia lævigata.

A specimen branch of a tree on which the lac insect is reared in Cachar, supplied by Mr. Mackenzie of the Rajpur Tea Estate, was forwarded to the Reporter on Economic Products for identification. It proved to be the *Grewia lævigata*, and Mr. Mackenzie has been asked to furnish further specimens of the tree and particulars with regard to it, as well as specimens of an allied species found in Cachar which is conjectured to be the *Grewia multiflora*.

Veterinary Science.

28. The subjoined statement shows the number of deaths of cattle reported from the several districts of the province during the past two years and the causes to which they were attributed :—

1	2		3		4		5		6		7		8		9		10	
District.	Rinderpest.		Foot and mouth disease.		Swelling of mouth and throat.		Diarrhœa, dysentery, and cholera.		Anthrax.		Catarrh.		Other diseases.		Total.		Estimated value of cattle.	
	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.	1895-96.	1896-97.
																	Rs.	Rs.
Cachar . . .	24	...	207	177	468	207	559	390	66	7	...	40	71	123	1445	944	23,244	16,080
Sylhet . . .	4,579	9,415	1,579	2,321	4,921	6,403	4,473	7,788	173	113	281	614	12,737	9,208	28,563	34,299	2,70,623	2,35,797
Goalpara . . .	1,774	2,139	1,629	3,057	2,241	1,547	2,469	1,945	50	492	1,084	1,092	14,190	23,832	23,454	33,017	1,97,832	2,86,147
Kamrup . . .	2,719	1,401	11,476	8,015	2,376	2,596	10,735	7,772	...	163	...	...	6,603	5,036	34,909	24,982	2,63,022	1,91,321
Darrang . . .	632	3,324	1,288	1,912	237	595	1,635	1,316	109	28	104	103	2,387	1,573	6,332	012	58,899	62,989
Nowgong . . .	621	133	7,295	1,947	1,020	722	2,430	2,857	...	...	...	...	3,769	2,389	16,114	8,048	1,12,793	72,432
Sibsagar . . .	41	354	812	1,038	741	543	1,569	1,766	595	162	294	99	6,140	4,114	10,172	8,077	1,32,414	87,266
Lakhimpur . . .	140	200	972	296	135	295	67	499	314	...	...	...	5,366	4,199	6,994	5,479	69,940	53,270
Naga Hills* . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Khasi and Jaintia Hills†	...	...	...	10	...	...	...	3	...	...	...	...	...	...	...	23	...	210
Garo Hills† . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL .	10,330	16,964	25,318	18,754	13,168	12,891	24,024	24,136	1,358	994	1,763	1,947	51,282	46,772	128,023	123,328	11,19,972	10,74,611

* The Deputy Commissioner is unable to furnish statistics.
† Statistics are available for Jowai sub-division only.
‡ Information not available.

There is reason to fear that the apparent decrease of mortality shown by these figures is the result of defective registration, as it is known that cattle diseases of different kinds were very prevalent in most of the districts of the Assam Valley during a portion of the year.

Entomology.

29. Dr. Watt's report on the results of his enquiries with regard to tea blights has not yet been received.

*Statistics,—*Agricultural and Fiscal Statistics.

30. These were compiled as usual in this department, and submitted in return XLI.B. on the 19th September 1896. Revised instructions for the guidance of district officers in preparing the return were drawn up and submitted for the Chief Commissioner's approval. With a view to obtaining more complete and accurate statistics of the areas under different crops for Table A3, a circular (No. 10, dated the 10th November 1896), containing revised instructions for the preparation of the district crop statement was issued during the year.

Trade statistics.

31. The quarterly and annual reports on the river-borne trade of the province and the triennial report on foreign trade, were issued as usual. On the opening of the Assam-Bengal Railway for goods traffic to Badarpore, arrangements were made for the registration of the trade of the province carried by that railway.

Proposals for the introduction of new forms for the Provincial returns of rail and river-borne trade, and for the alteration of the arrangement of internal trade blocks were submitted to the Chief Commissioner towards the close of the year.

The river traffic registration offices at Dhubri and Bhairab Bazar were inspected by me during the year. I also inspected the office at Maulvibazar at which trade with Hill Tipperah is registered, and the arrangements for the registration of trade with Bhutan and Towang at Darranga, Bengbari and Udalguri.

Mineral statistics.

32. The return of Mineral Statistics was prepared in this Department from information supplied by district officers, and submitted on the 29th March 1897.

Experimental crop cuttings.

33. A note on the results of experimental crop cuttings carried out during the year with a view to the preparation of the quinquennial return of the outturn of crops, was published as usual.

Returns of prices-current and wages.

34. The duty of receiving and compiling these returns was transferred to this department during the year. The following returns were compiled.

Weekly Return of retail prices-current of food-grains and salt—for publication in the *Assam Gazette*.

Fortnightly Return of retail prices-current of food-grains and salt—for submission to the Government of India in the Department of Finance and Commerce.

Fortnightly Return of wholesale prices-current—for submission to the Director General of Statistics.

Half-yearly Return showing the average wages of agricultural labourers, etc.,—for submission to the Government of India in the Department of Finance and Commerce.

CHAPTER V.

SCIENTIFIC AND LOCAL ENQUIRY UNDER PROVINCIAL DIRECTION.

General remarks.

35. Hitherto there has been no agricultural expert employed under this department, and there is no experimental or demonstration farm in the province; experiments designed to encourage the introduction of improved varieties of the crops now cultivated, or of new staples, can, therefore, only be carried out by distributing seeds to selected institutions and individuals who may be found willing to undertake their cultivation.

Boro dhán.

36. As stated in paragraph 32 of last year's report, the experiments made with this description of rice in the Assam Valley districts in 1895-96 proved a failure. During the year under report the experiment was repeated in the Goalpara and Sibsagar districts, to each of which one maund of carefully selected seed was supplied from Sunamganj. The seed supplied to Goalpara was made over to the tahsildar of Bijni in the Eastern Duars under whose supervision it was sown and transplanted over an area of 5 bighas. This crop proved successful, yielding an outturn of 7½ maunds of paddy per bigha. The seed supplied to the Deputy Commissioner of Sibsagar was sown at different localities in the Sadr and Namtidol tahsils and Silakuti mauza, but proved a failure everywhere, chiefly owing to the unusually dry cold season, except on one plot of 1¼ *katha* in the Solaguri mauza, where the crop matured well and promised to yield an outturn of about 4⅝ maunds of paddy, or at the rate of 15 maunds a bigha, but was unfortunately destroyed by elephants before it could be harvested. The experiment will be repeated during the current year in the two districts named.

Jute.

37. Two maunds of Serajgunj jute seed each were supplied to the tahsildar of Bijni and the Sub-Divisional Officer of Barpeta for distribution to the raiyats. The former officer is making what promises to be a successful attempt to introduce the cultivation of this staple in his tahsil, and in 1895-96 procured of his own motion jute seed from Chota Guma in the

west of Goalpara, for distribution, and brought a cultivator from that part of the district to teach the process of preparing the fibre to the local raiyats. It appears from an interesting report which he has submitted that the area under jute in the tahsil in 1896-97 was more than treble that of 1895-96, and that an export trade in the article is springing up at Bijni Bazar.

Potatoes.

38. Very good results having been obtained from the cultivation of Naini Tal seed potatoes, at Kunjupkul, near Manipur, by the Political Agent and Superintendent of the Manipur State, one maund of 4 oz. setts and 2 maunds of 2 oz. setts of these potatoes were procured through the Secretary to the Agricultural and Horticultural Society of India for experimental cultivation in the Khasi Hills, and made over to an educated native of the district who takes an interest in agriculture. They were planted by him in a field at Shillong in which potatoes raised locally from Kumaon stock and ordinary Khasi potatoes were planted at the same time and under similar conditions. The following table gives the results of this parallel experiment:—

Name of each variety and size of setts.	Weight of seed potatoes.		Outturn.						Remarks.
			Table potatoes.		Small potatoes.		Total Outturn.		
	Mds.	Seers.	Mds.	Seers.	Mds.	Seers.	Mds.	Seers.	
1 Naini Tal 4 oz.	1	...	3	27	...	21	4	8	Planted in halves.
2 „ 2 oz.	2	...	14	33	1	27	16	20	„
3 Local Kumaon 4 oz.	1	...	7	34	...	25	8	19	„
4 „ 2 oz.	2	...	14	15	1	8	15	23	„
5 „ 1 oz.	2	...	12	38	1	17	14	15	Planted whole.
6 „ below 1 oz.	2	...	23	13	1	21	24	34	„
7 Khasi „ „	...	30	2	24	...	28	3	12	„
Total	10	30	79	24	7	27	87	11	

It will be seen that the outturn per maund of seed for each class of potatoes was as follows:—

	Mds.	Srs.
Naini Tal 4 oz setts.	4	8
„ 2 oz. „	8	10
Local Kumaon 4 oz. „	8	19
„ 2 oz. „	7	31¼
„ 1 oz. „	7	7½
„ below 1 oz. „	12	17
Khasi below 1 oz. „	4	16

The average outturn of the Naini Tal potatoes was much less than that obtained at Kunjupkul, where a yield of 95 maunds was obtained from 4½ maunds of seed of this variety. This was, however, on a very rich soil. The potatoes were planted in the first week of February 1897, the holes being made 18 inches apart for the Naini Tal and local Kumaon, and 9 inches apart for the Khasi potatoes. Germination was delayed till the latter part of March by the unusually dry weather in February, and the crop was seriously damaged by hailstorms which occurred on the 13th and 28th April. The earthquake of the 12th June also did much harm, the beds being shaken so that many of the tubers were exposed at the surface and rotted. Part of the crop of Naini Tal potatoes is being distributed as seed to Khasi cultivators who may be willing to experiment with it, and part will be re-planted on the same land, in order to ascertain whether a second crop can be obtained during the year, as from the Khasi variety. It is intended to commence in

February next a similar experiment with the varieties of potato above mentioned, and other varieties.

Sixteen maunds of Khasi seed potatoes procured through the Deputy Commissioner of the Khasi and Jaintia Hills were supplied to the Superintendent of the Tezpur Jail for experimental cultivation. Of this quantity 20 seers were planted in the jail garden on land which had been used for trenching night-soil in the previous year, and yielded an outturn of 2 maunds 30 seers, while 12½ maunds planted on some *chur* land gave an outturn of 46 maunds 37 seers. Three maunds of seed potatoes of the same description were supplied to the Superintendent of the Dibrugarh Jail, and planted on the jail land, but the crop proved a total failure, the potatoes having been planted in a clay soil late in the season.

Fruit trees.

39. The small Government plantation of Malta oranges, lemons, and citrons near Theriaghat was started in 1885, in view of the reputed efficacy of these fruits as a remedy for malarious fever. As the trees are now coming into bearing, a supply of the fruit was sent during the year to the Civil Surgeons of Sylhet and Shillong with a view to having their medicinal properties tested. No very definite results have been arrived at as yet. There seems to be some doubt whether the fruits in question are of use for the treatment of fever, but the Principal Medical Officer is inclined to think that they will prove valuable for their antiscorbutic properties. The plantation was kept in order, as usual, during the year.

The head-quarters of the North Cachar sub-division having been transferred from Gunjong to Haflong, there is now no one at Gunjong to look after the fruit trees recently planted there. Arrangements were, therefore, made to transfer such of them as would bear transplanting to Haflong. Some orange, apple, pear, apricot, and plum trees were successfully transplanted under the superintendence of the Sub-Divisional Officer of North Cachar. Some grafts of fruit trees which were procured from Naini Tal for Kohima unfortunately arrived at the latter station almost dead, owing to defective arrangements made for their transmission, and could not be revived. They will be replaced next cold weather.

Coffee.

40. Within the last few years coffee has been grown experimentally on small areas in several gardens of South Sylhet. On one estate the coffee enterprise has been taken up on a more extensive scale, and about 160 acres have been planted partly with Arabian and partly with Liberian coffee. Some of these plants have now arrived at maturity, and both varieties are doing well. As might be expected, however, the Liberian coffee appears to have the more robust and vigorous growth in the climate of Sylhet.

Sissal hemp.

41. On the Daulacherra Tea Estate in South Sylhet an interesting experiment is now being made in the cultivation of Sissal hemp (*Agave rigida var sissalana*). Three years ago an area of about 100 acres was planted with this aloe, and the results have so far been most encouraging, the plants having thriven well and proved remarkably hardy. It remains to be seen whether the fibre yielded by these plants is equal in quality to that produced in Yucatan and the Bahamas, in which case the prospect of a new and most profitable local industry would appear to be opened out.

Manilla hemp.

42. On the same estate the species of banana producing Manilla hemp, *Musa textilis*, has been cultivated experimentally for the past four years. This variety has not hitherto been successfully cultivated except in the Phillipine Islands. At Daulacherra it appears to thrive well on *bhil* land without much attention, but the quality of the fibre obtained from it has not yet been satisfactorily determined.

Ginger.

43. Mr. Mackenzie of the Rajpur Tea Estate, Cachar, who has lately introduced the cultivation of ginger on the estate, asked for certain information with regard to the method followed in preparing ginger for the market in Cochin. The information was obtained through the Department of Land Records and Agriculture, Madras, and communicated to Mr. Mackenzie.

Breeding bulls.

44. At the commencement of the year there were two Government Kenwari breeding bulls in the province, one stationed at Sibsagar, and the other in North Cachar. The Kenwari bull at Sibsagar was transferred to Mangaldai at the end of April 1896, and died there in

February 1897. The Kenwari bull at North Cachar, which was becoming old and useless, was sold in November 1896. The statement below shows the cost of the keep of these animals and the successful coverings by them during the year.

District.	Wages of keeper.	Cost of food.	Miscellaneous.	Total.	Number of successful coverings during 1896-97			Total for 1895-96.
					Male.	Female.	Total.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.				
Cachar . . .	18 0 0	40 0 0	...	58 0 0	4	6	10	16
Darrang . .	76 9 2	83 6 0	...	159 15 2	4	3	7	...
Sibsagar . .	24 0 0	23 6 9	37 12 0	85 2 9	...	...	...	...
Total .	118 9 2	146 12 9	37 12 0	303 1 11	8	9	17	16

Five breeding bulls, three of the Khairigarh, one of the Parehar, and one of the Kosi breed were procured through the Department of Land Records and Agriculture, North-Western Provinces and Oudh, and arrived towards the close of the year. Of the Khairigarh bulls one has been stationed at Haflong in North Cachar, and one at Haripur in the Jaintia parganas of Sylhet, while the third has been placed in charge of Mr. H. R. Forbes, Honorary Magistrate of Naharjan in Sibsagar district. The Parehar bull has been stationed at Silchar and the Kosi bull at Shillong. The Director of Land Records and Agriculture, Burma, was requested to obtain for this Department two Burma bulls, one being intended for the Cachar district, and the other for the Jaintia parganas, but has not yet succeeded in procuring suitable animals.

Proposed dairy farm at Shillong.

45. Mr. Keventer, the Manager of the Aligarh dairy farm, paid a visit to Shillong in January 1897, and made enquiries as to the possibility of establishing a dairy farm near the station. From his report, which was received after the close of the year, it appears that the demand for dairy produce in Shillong is too small to induce an European to start a dairy farm as a private speculation, and that, as in the winter months there is little or no pasture in the neighbourhood, while all kinds of cattle food are very expensive, the success of such an undertaking must depend on whether fodder crops could be successfully grown on the farm lands. Mr. Keventer recommends that experiments be made to ascertain whether oats, barley, lucerne, carrots, mangel-wurzel and rye can be grown near Shillong, and has suggested certain sites for the purpose. Before, however, commencing such experiments, I propose to avail myself of the advice of the agricultural expert who is shortly to be attached to this Department as Assistant to the Director of Land Records and Agriculture.

CHAPTER VI.

Agricultural Education.

Agricultural education.

46. The question how far the present educational system of the province meets the requirements necessary for the instruction of boys designed for an agricultural calling has been discussed in the notes recorded by the Director of Public Instruction, and the permanent Director of this department at the Provincial Agricultural Conference of January 1896, and there is nothing which I can usefully add to their remarks. Proposals for a general scheme of providing suitable readers and text books with a view to the improvement of the education of the agricultural classes have recently been called for from the Director of Public Instruction,* and in the meanwhile a short manual on mensuration and surveying is being prepared, with his co-operation, in this department, to meet the want of a practical text book in those subjects for the guidance of mandals and patwaris, and for use in Upper Primary, Middle and Survey Schools.

* Letter No. 105-Agri—2244 R., dated the 1st June 1897, from the Officiating Secretary to the Chief Commissioner, to the Director of Public Instruction.

It has been decided that Assam is not in a position to maintain a separate training school for teachers, but that, in the event of such an institution being

established in Bengal, selected Schoolmasters and Sub-Inspectors of schools might be deputed there from this province for training.

CHAPTER VII.

PUBLICATION OF AGRICUTURAL INFORMATION.

Weather and crop reports and mustard forecasts.

47. The weekly weather and crop reports were prepared as usual in this office for publication in the Gazette. The preliminary and final forecasts of the mustard crop were prepared and forwarded to the Director General of Statistics.

Information obtained from circle books and district officers.

48. As explained in paragraph 25 above the system of circle books has not yet been introduced in this province. Instructions to district officers to communicate to this department notes of any remarkable facts bearing on agriculture which may come to their notice in the course of their tours, and to forward extracts from their tour diaries, and those of officers subordinate to them relating to agriculture, have been issued since the close of the year under report.

The ledger system.

49. The system of ledgering useful facts and information relating to agriculture was introduced in this department in 1892. Extracts from newspapers and pamphlets, letters, reports, etc., relating to the subjects of the different collections were added to them during the year. These collections are not as complete as might be desired, and much information remains to be extracted from old files of correspondence and official reports, the weakness of the office staff having hitherto impeded the progress of the work. It is hoped that, with the increase of establishment recently sanctioned, the information now available will soon have been collected and classified under the appropriate heads, and it will then only remain to keep the collection up to date by the addition of new material, and to open new collections as may be required.

Publication of special works.

50. The information collected with regard to the cultivation and preparation of Rhea (*vide* para. 27 above) was arranged, with a view to its publication in the form of a bulletin illustrating the position of the industry in this province.

Papers communicated to the Agricultural Ledger.

51. A list of the papers communicated to the Reporter on Economic Products by or through the agency of this department for incorporation in the Agricultural Ledger, is given in Appendix K.

Papers received from, and communicated to, other Provincial departments.

52. The following Agricultural Bulletins were received from other Provincial departments:—

Bengal	Bulletin No 3 of 1896—on wheat.
North-Western Provinces and Oudh	Bulletin No. 5 of 1896—on a new method of tree planting.
Madras	Bulletin No. 32 of 1896—on experiments with water lifts.
Madras	Bulletin No. 34 of 1896—on Tamil sayings and proverbs on agriculture.

A note by the Deputy Collector of Cochin on the method of preparing ginger for the market in Cochin was also received from the Madras department.

Monographs on dyes and dyeing were received from the following provinces:—

Bengal.	Bombay.
Madras.	North-Western Provinces and Oudh.
Hyderabad and Berar.	

Copies of the Annual Reports of the different Provincial departments were also received. Copies of the Monograph on Dyes and Dyeing prepared by Mr. W. A. M. Duncan, I.C.S., and of the Annual Report of this department were distributed to the Departments of Land Records and Agriculture of other provinces from the Secretariat.

CHAPTER VIII.

FINAL.

53. The following statement gives details as to the expenditure incurred by this department during the year, and compares the figures with those of the preceding year :—

Expenditure.

Year.	Superintendence, etc.	Settlement offices.	Survey schools.	Kanungo establishment.	Registration of trade.	TOTAL.
£	₹ a. p.	₹ a. p.	₹ a. p.	₹ a. p.	₹ a. p.	₹ a. p.
1895-96 . .	43,499 13 9	46,293 3 8	2,159 5 1	1,35,496 7 8	...	3,17,448 14 2
1896-97 . .	43,503 0 11*	69,563 1 7†	2,270 3 6	1,41,256 10 0‡	4,253 15 9§	2,60,846 15 9

* This includes—

	₹ a. p.
(a) Head office charges . . .	32,854 11 10
(b) Charges for the office of the Superintendent of Land Records . .	9,886 4 5
(c) Experimental cultivation . .	477 9 0
(d) Veterinary charges . . .	429 5 2
(e) Rain-gauge charges . . .	101 2 0
(f) Economic collection . . .	254 0 6
TOTAL .	43,503 0 11

† This includes—

	₹ a. p.
(a) Cost of Jaintia Settlement office .	9,079 6 11
(b) ,, Cachar ,, ,, .	55,554 4 11
(c) ,, Ilam ,, ,, .	4,338 5 9
TOTAL .	69,563 1 7

‡ This includes—

	₹ a. p.
(a) Registrar kanungos	8,023 8 7
(b) Assistant registrar kanungos	2,155 13 2
(c) Supervisor kanungos	17,970 5 0
(d) District mandals	1,00,422 10 3
(e) Chain men and peons	3,333 12 10
(f) Temporary establishment	1,105 13 0
(g) Travelling allowance	545 2 0
(h) Cost of instruments and repairs	1,929 0 6
(i) Petty construction and repairs	384 0 0
(j) Rewards	2,952 7 6
(k) Map charges	52 5 0
(l) Compensation for dearness of food grains	408 7 11
(m) Office expenses and miscellaneous	1,963 4 3
TOTAL .	1,41,256 10 0

§ This includes—

	₹ a. p.
(a) Registration of river-borne trade	3,136 8 9
(b) Provincial statistics (Frontier trade)	1,117 7 0
TOTAL .	4,253 15 9

The increase under the head "Settlement Offices" is due to the strengthening of the Cachar settlement establishment, which was found necessary in order to complete the settlement of the district within the allotted time; the re-organisation of the Jaintia Settlement office, for the purpose of entering the revenue demand calculated at the rates finally sanctioned by the Government of India, in the *jamábandis*, *tauzis*, and pattas, and of bringing the settlement papers up to date; and the commencement of the survey and settlement of *ilam* lands in Sylhet.

The increase under the head "Kanungo Establishment" is due to the raising of the monthly rates of pay of mandals of the 2nd and 3rd grades from Rs. 9 and Rs. 6 to Rs. 10 and Rs. 8 respectively and to the entertainment in Cachar of the new Land Records Establishment referred to in paragraph 6 of this report. Charges on account of registration of trade appear for the first time in the statement, having been transferred to the budget of this department with effect from the 1st April 1896, in accordance with the orders contained in letter No. 120 Budget — 867-A., dated the 11th June 1895, from the Secretary to the Chief Commissioner.

F. J. MONAHAN,

Offg. Director, Department of Land Records and Agriculture, Assam.

DATED SHILLONG;
The 20th September 1897.

APPENDIX A.

Diary Statement of Sub-Deputy Collectors and Probationers for the appointment of Sub-Deputy Collector for the year 1896-97.

Name of Sub-Deputy Collector or Probationer.	District.	Sub-division.	Number of days in charge.	NUMBER OF DAYS ON TOUR.									NUMBER OF DAYS WITHOUT WORK.							Remarks.
				In Cadastral Matters.					In Non-cadastral Matters.				Number of days at office work.	Travelling from place to place.	Gazetted holidays.	Sick.	Privilege leave.	Leave on half pay.	Leave without pay.	
				Hearing check cases.	Testing crops.	Examining panchâit or patwaris papers.	Enquiring into cases.	Miscellaneous work, inspecting thakbast, identification, etc.	Training recruits.	Examining panchâit or patwaris papers.	Enquiring into cases.	Miscellaneous work.								
				Total.					Total.				Total.						Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Babu Purna Chandra Mitra, Sub-Deputy Collector.	Sylhet	Karimganj	136	...	...	...	16	3	5	...	2	16	42	68	...	...	...	26	...	...	26	
Do. do.	,,	North Sylhet (Jaintia).	229	11	31	16	7	76	...	...	...	...	140	89	...	...	...	...	...	...	...	
,, Tripura Charan Mukharji, Sub-Deputy Collector.	,,	Karimganj	226	6	7	5	8	10	1	...	79	8	123	81	18	4	...	...	...	...	22	
,, Do. do.	Goalpara	Dhubri	131	2	...	2	2	9	...	...	...	...	16	79	28	...	18	...	...	...	36	
Munshi Faizuddin Ahmed, Probationer.	,,	,,	121	55	4	12	2	11	2	2	3	24	120	1	...	...	...	...	...	...	...	
Babu Rajani Kanta Bardalai, Sub-Deputy Collector.	Kamrup	Barpeta	365	84	19	31	...	35	1	2	6	...	163	181	1	26	45	...	...	...	72	
,, Bhola Nath Das, Sub-Deputy Collector.	,,	Gauhati	365	43	6	38	15	69	5	...	...	10	176	163	...	23	3	...	...	...	26	
,, Jajneswar Das Gupta, Sub-Deputy Collector.	Darrang	Mangaldai	365	50	7	50	8	14	2	...	...	24(a)	150	166	...	20	10	19	...	...	49	(a) Waste land grant, survey, etc. (b) Casual leave.
,, Krishna Chandra Chaudhuri, Sub-Deputy Collector.	,,	Tezpur	365	52	...	10	11	98	...	...	...	15	181	147	...	24	6	7(b)	...	...	37	
,, Radha Mohan Das, Sub-Deputy Collector.	Nowgong	Nowgong	365	63	2	30	10	48	...	...	...	18	171	157	11	10	16	...	...	...	37	
Munshi Didaruddin Ahmed, Sub-Deputy Collector.	Sibsagar	Golaghat*	26	8	...	2	1	7	...	...	...	...	18	7	1	...	...	...	...	...	1	
Babu Rajkumar Rai, Sub-Deputy Collector.	,,		327	50	...	10	1	78	14	...	..	5	158	147	17	4	1	...	...	...	22	
,, Radha Kanta Handiqui, Sub-Deputy Collector.	,,	Jorhat	365	77	3	9	8	68	...	...	...	...	165	146	...	26	...	9	...	...	35	
,, Rajkumar Rai, Sub-Deputy Collector.	,,	Sadr†	29	4	...	8	...	6	...	...	...	...	18	13	2	...	1	...	...	...	3	
Munshi Didaruddin Borah, Sub-Deputy Collector.	,,		326	21	1	16	15	68	...	...	...	...	121	145	8	8	14	30	...	...	60	
Maulvi Muhammad Sadir, Sub-Deputy Collector.	Lakhimpur	North Lakhimpur	273	30	3	10	13	17	8	1	10	1	92	169	...	4	8	...	...	...	12	
Munshi Mashiat Ullah, Sub-Deputy Collector.	,,	Dibrugarh	278	30	...	10	20	12	...	2	7	1	72	148	2	44	2	10(b)	...	...	58	
Babu Hem Chandra Goswami, Probationer.	,,		87	4	...	11	4	17	...	4	8	8	56	24	2	5	...	...	...	...	7	

*The Sub-division was without a Sub-Deputy Collector for 12 days.
† ,, ,, ,, ,, 19 ,,

APPENDIX B.

Diary Statement of Supervisor Kanungos and Surveyors for the year 1896-97.

Name of Supervisor Kanungo or Surveyor.	Name of Circle.	District.	Sub-division.	Number of days in charge.	NUMBER OF DAYS ON TOUR.									Number of days at office work.	NUMBER OF DAYS WITHOUT WORK.							REMARKS.
					In Cadastral Matters.					In Non-cadastral Matters.												
					Scrutinising chak lists.	Testing cross.	Examining, mandals' or patwaris' papers.	Enquiring into cases.	Enquiring into cases.	Miscellaneous work, including attendance, etc.	Testing records.	Examining, mandals' or patwaris' papers.	Enquiring into cases.	Miscellaneous work.	Total.		Travelling from place to place.	Gazetted holidays.	Sick.	Privilege leave.	Leave on half pay.	Leave without pay.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Binod Behari Chaudhuri	Hailakandi	Cachar	Hailakandi	31	5	11	6	1	...	...	...	2	...	25	2	4	...	...	...	...	...	4	
Gopi Charan De	Katigara (I)	"	Sadr	322	50	41	32	14	33	...	...	...	...	214	93	3	6	...	...	...	...	9	
Kamini Kumar De	" (II)	"	"	31	...	...	...	...	...	...	...	...	...	...	29	...	2	...	...	...	...	2	
Brajendra Kisore Das	"	"	"	221	22	16	28	23	28	...	...	...	...	111	89	13	8	...	...	...	...	21	
Brajendra Kisore Das	Jalmagar	"	"	101	5	14	1	...	4	...	...	...	...	24	70	3	4	...	...	...	...	7	
Sambhu Ram Das	Silchar	"	"	31	...	...	...	...	...	...	...	...	...	...	30	...	...	...	...	...	...	...	
Dina Nath Ghosh	Chatla Haor	"	"	29	6	...	...	...	...	...	...	...	...	6	21	...	2	...	...	...	...	2	
Sasi Kumar Kar	Circle No. I	Sylhet	North Sylhet.	365	3	35	32	3	9	...	...	...	...	81	252	7	23	2	...	...	...	32	
Kamini Kumar De	" II	"	"	365	39	35	8	7	15	...	...	...	...	104	200	16	25	...	20	...	...	61	
Abdus Sabur	" III	"	"	365	39	18	20	5	16	...	...	...	...	120	233	...	8	4	...	...	...	12	
Ambika Charan Banarji	" IV	"	"	365	36	24	27	5	20	...	...	...	...	112	218	3	26	6	...	...	...	35	
Rati Ram Das	Bijni	Goalpara	Dhubri	365	75	8	...	...	98	...	...	...	...	181	173	5	...	4	...	...	...	15	
Joy Ram Deka	Rajali	Kamrup	Barpeta	308	132	25	...	25	23	...	...	...	...	204	89	4	3	3	7	...	...	20	
Purnananda (offg.)	"	"	"	57	9	5	...	3	3	...	...	...	...	18	19	...	20	...	...	...	...	17	
Basir Ali Biswas	Barpeta	"	"	268	64	10	1	7	66	...	...	...	...	148	103	...	1	6	10	...	...	46	
Bliss (offg.)	"	"	"	97	68	4	...	1	15	...	...	...	...	88	14	...	...	...	...	...	...	...	
Bhagirath Deka	Boha	"	"	305	105	13	21	13	52	...	...	...	1	204	65	8	1	27	...	...	...	36	
Sibonth (offg.)	"	"	"	60	...	...	...	...	...	...	...	...	...	...	56	4	...	...	...	...	...	4	
Nityananda	Balisala	"	Gauhati	365	39	31	20	13	96	...	...	...	...	198	124	20	12	11	...	...	...	43	
Kan Nath	Palasbari	"	"	365	131	22	28	11	13	...	...	...	...	204	135	14	5	2	...	...	...	26	
Rang Deb	Boko	"	"	365	33	43	36	2	29	...	...	...	...	143	67	31	2	30	22	...	...	85	
Bati Ram	Patidarrang	"	"	198	27	24	11	20	37	...	...	...	...	119	49	21	2	2	...	...	...	25	
Nar Nath (offg.)	"	"	"	172	22	...	10	39	13	...	...	...	...	84	74	6	...	4	...	...	2	14	
Jiu Ram	Hajo	"	"	339	51	15	2	64	59	...	...	...	...	191	116	10	18	...	7	...	...	41	
Chent Ram (offg.)	"	"	"	26	11	...	...	2	9	...	...	...	...	22	...	2	1	1	...	...	...	4	
Molan Chandra	Barkhetri	"	"	365	101	6	6	84	10	...	...	...	...	207	115	13	17	13	...	...	...	43	
Tika Ram	Barigog	"	"	236	22	13	2	25	93	...	...	...	...	155	41	14	15	1	...	...	...	30	
Dhaneswar (offg.)	"	"	"	139	15	...	5	7	13	...	...	...	...	45	60	12	3	19	...	...	...	34	
Mantan Ram	Pandari	"	"	334	16	14	4	23	49	...	...	...	...	111	60	17	9	3	25	...	...	54	
Lalit Ram Das (offg.)	"	"	"	131	13	...	9	11	28	...	...	...	...	61	60	10	...	...	...	...	...	10	
Santi Ram	Nalbari	"	"	281	20	70	25	76	19	...	...	...	...	210	52	15	4	...	...	...	...	19	
Naumi (offg.)	"	"	"	84	14	...	...	13	15	...	...	...	...	42	38	4	...	...	...	...	...	4	
Jagat Ram	Tambulpur	"	"	365	102	9	16	3	76	...	...	...	...	206	152	3	...	5	...	...	...	7	
Madhab Ram	Barama	"	"	365	102	20	9	25	101	...	...	...	...	257	79	17	8	...	...	...	...	23	

Chandra Kanta Sarkar	Sipajhar	Darrang	Mangaldai	305	69	10	9	9	14	...	...	...	...	111	153	25	...	16	...	...	...	41	
Sara Ram (offg.)	,,	,,	,,	60	8	...	5	9	6	...	...	...	...	28	25	2	6	...	...	...	...	7	
Kalamani Das	Mangaldai	,,	,,	216	31	...	1	11	...	...	...	...	...	43	149	7	12	5	...	...	...	24	
Mani Ram Das (offg.)	,,	,,	,,	149	34	12	1	4	26	...	...	1	...	78	69	...	..	2	...	...	...	2	
Jajna Ram Sabaria	Kalaigaon*	,,	,,	122	7	...	6	1	17	...	...	...	...	31	12	8	17	26	6	...	22	79	
Rammal Das	,,	,,	,,	139	53	9	10	...	27	...	...	...	...	58	30	...	1	...	10	...	...	11	
Bahu Ram Das (offg.)	,,	,,	,,	92	1	...	...	...	5	...	...	...	...	6	86	...	...	...	...	...	...	...	
Rammal Das	Bengbari	,,	,,	226	20	...	38	1	12	...	...	...	...	66	143	4	10	3	...	...	...	17	
Baha Ram Das (offg.)	,,	,,	,,	139	27	9	16	...	39	...	...	...	...	91	43	6	...	1	...	...	...	6	
Durga Ram Datta	Western Circle	,,	Tezpur	366	40	6	30	...	111	...	...	...	...	186	110	...	42	...	17	...	10	69	
Nandi Nath Sarma (offg.)	Eastern ,,	,,	,,	365	63	18	14*	15	95	...	...	...	...	206	111	8	29	8	4	...	..	49	
Uma Kanta Sarma (offg.)	Town	Nowgong	Nowgong	30	...	...	1	...	15	...	...	...	...	16	7	6	1	...	...	...	...	7	
Gajendra Narayan Das (offg.)	,,	,,	,,	235	47	7	7	...	83	...	9	...	...	116	111	2	6	...	...	...	...	8	
Pua Ram Mohanta	,,	,,	,,	100	22	4	27	...	20	...	...	...	...	73	24	1	2	...	...	...	...	3	
Ram Rath Datta	Silghat	,,	,,	355†	60	12	9	13	119	...	1	...	...	221	121	7	1	5	...	...	...	13	† Exclusive of 10 days spent at Tezpur.
Dampati Das	Doboka	,,	,,	280	56	7	...	29	63	...	...	...	...	154	85	10	15	2	14	...	...	41	
Tara Nath Bora	,,	,,	,,	85	11	10	...	4	54	...	...	...	...	79	...	5	1	...	...	...	...	6	
Shib Nath Sarma	Raha	,,	,,	365	100	20	13	8	70	6	2	1	1	226	118	...	...	21	...	...	...	21	
Gobinda Ram Datta	Dhing	,,	,,	365	82	11	12	11	128	...	...	...	...	244	90	...	12	...	19	...	...	31	
Gopal Chandra Goswami (offg)	Gerua	,,	,,	91	29	...	...	...	31	...	...	...	...	60	12	9	1	9	...	...	...	19	
Surath Chandra Bora	,,	,,	,,	274	43	17	11	...	31	...	...	...	...	152	96	8	12	6	...	...	...	26	
Lakhi Ram Das	Ghingua‡	,,	,,	285	64*	15	20	7	40	...	...	...	...	146	76	12	15	...	17	...	...	44	‡ The Circle was without a Supervisor Kanungo for 15 days.
Dampati Das	,,	,,	,,	85	6	...	11	5	52	...	...	...	...	73	6	...	1	5	...	...	...	6	
Tita Ram Gagai	Mayang	,,	,,	143	4	...	...	...	62	...	...	...	...	66	51	9	...	17	...	...	...	26	
Durga Ram Das (offg.)	,,	,,	,,	122	16	10	5	...	57	...	...	...	...	78	18	10	1	5	...	...	...	16	
Gajendra Narayan Das	,,	,,	,,	100	2	6	6	...	64	...	...	...	...	78	5	16	1	...	...	...	...	17	
Manuram Talukdar	Northern Circle	Sibsagar	Golaghat	365	45	63	...	10	95	...	...	...	...	213	140	...	12	...	...	...	...	12	
Pua Ram Mahanta	Southern ,,	,,	,,	253	57	18	4	10	38	...	...	...	...	127	108	3	7	8	...	...	...	18	
Bhakat Ram Datta	,, ,,	,,	,,	112	9	12	...	5	29	...	...	...	...	73	36	2	1	...	...	...	...	3	
Bhola Ram Datta	Eastern ,,	,,	Jorhat	365	87	23	10	13	63	...	...	...	...	201	149	2	4	9	...	...	...	15	
Mahiram Das (Senior)	North-Western Circle.	,,	,,	365	56	28	21	23	64	...	1	...	...	193	167	...	2	3	...	...	...	5	
Kati Ram Das	South-Western Circle.	,,	,,	365	45	17	41	16	68	...	...	...	...	187	155	...	18	10	...	...	...	23	
Mina Ram Das	Majuli Circle	,,	,,	365	91	7	11	1	99	7	2	3	4	225	99	10	16	2	13	...	...	41	
Sibram Bora	Eastern ,,	,,	Sadr	365	113	24	34	3	51	1	1	...	...	232	115	2	16	...	...	...	...	18	
Govinda Nath Roy	Central ,,	,,	,,	356	39	14	15	11	35	...	...	...	35	189	141	1	16	...	...	9	...	26	
Malbhog Gagai (offg.)	,, ,,	,,	,,	9	3	...	...	1	3	...	...	...	...	7	2	...	...	...	...	...	...	2	
Lalit Ram Chaudhuri	Western ,,	,,	,,	320	69	15	20	5	58	...	...	...	...	167	146	4	2	1	...	...	...	7	
Trahi Ram Bairagi (offg.)	,, ,,	,,	,,	45	31	...	...	...	10	...	...	...	...	41	...	4	...	...	...	...	...	4	
Jagannath Deka	North Lakhimpur.	Lakhimpur	North Lakhimpur.	361	69	30	30	2	5	1	2	1	2	142	110	2	5	2	...	...	...	9	
Bhabiram Raj Kumar (offg.)	,, ,,	,,	,,	104	7	15	20	...	10	1	5	...	1	59	39	1	2	3	...	...	...	6	
Maheswar Das	Dibrugarh	,,	Dibrugarh	274	20	...	7	31	90	...	...	...	...	148	105	...	18	3	...	...	...	21	
Janardan Sarma (offg.)	,,	,,	,,	91	1	15	4	5	35	...	...	...	...	62	27	...	...	...	...	...	...	1	
Lakhikanta Das	Chabua	,,	,,	365	33	22	10	4	136	...	...	...	...	204	124	...	22	4	10	...	...	37	
Samudra Narayan Das, Surveyor	,,	Kamrup	Gauhati	365	42	2	8	4	70	16	5	...	18	166	120	22	18	10	30	...	...	80	
Mazaffar Ali, Surveyor	,,	Lakhimpur	Dibrugarh	306	...	...	...	...	...	...	1	...	141	142	124	4	22	7	...	...	...	40	
Chandreswar Changkakati, Offg. Surveyor.	,,	,,	,,	59	...	...	...	...	...	...	...	...	51	51	3	6	...	...	...	...	...	5	

* The Circle was without a Supervisor Kanungo for 12 days.

APPENDIX C.

Work Statement of District and Sub-Divisional Officers for the year 1896-97.

PART I.—DEPUTY COMMISSIONERS.

Name of officer.	District.	Sub-division.	AREA CADASTRALLY SURVEYED.														AREA NOT CADASTRALLY SURVEYED.						AREA FOUND WRONGLY CLASSIFIED.				REMARKS.
			Total number of Supervisor's Kanungos.	Number of Supervisor Kanungos whose work was inspected.	Number of villages tested.	Total number of mauzdis or patwaris	Number of mauzdis or patwaris: White papers were tested.	Number of mauzdis or patwaris: Whose field work was tested.	Testing by check lines: Number of lines.	Testing by check lines: Number of stations.	Testing by check lines: Number of offsets.	Testing by check lines: Total length of lines, in miles.	Testing by check lines: Area of outstanding cultivation in jurisdiction, in acres.	Testing by check lines: Number of linear miles per square mile of fluctuating cultivation.	Testing without check lines: Number of fields tested.	Testing without check lines: Area tested, in acres.	Total number of mauzdis.	Number of mauzdis: White papers were examined.	Number of mauzdis: Whose field work was tested.	Total area tested, as returned by mauzdars, in acres.	Total area as found on re-measurement, in acres.	Percentage of error in mauzdars's papers.	Area of concealed cultivation discovered, in acres.	*Basti* shown as *Rayati*.	*Rayati* shown as *Faringati*.	*Faringati* shown as *Rayati*.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
A. G. Hallifax, Esq., Deputy Commissioner.	Goalpara	...	...	...	13	...	...	...	...	...	...	...	...	...	...	...	19	3	...	...	...	...	...	...	...	...	
Captain F. E. T. Gordon, Deputy Commissioner.	Kamrup	...	14	...	3	271	...	3	3	41	89	1·67	52,386·13	0·02	6	9	29	...	1	45·7	46	0·65	...	...	0·50	...	
Lieutenant-Colonel M. A. Gray, Deputy Commissioner.	Darrang	...	6	2	2	112	13	2	4	40	80	2·37	14,919	0·10	...	...	27	3	...	...	...	...	...	...	...	...	
C. G. M. Kennedy, Esq., Deputy Commissioner.	Nowgong	...	8	6	6	155	31	8	7	82	103	2·60	44,103	0·04	...	...	11	3	...	...	...	...	...	...	...	...	
F. C. Henniker, Esq., Deputy Commissioner.	Lakhimpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	58	...	1	8·34	7·27	12·83	...	...	...	...	

PART II.—SUB-DIVISIONAL OFFICERS AND EXTRA-ASSISTANT COMMISSIONERS.

W. J. Reid, Esq., Sub-Divisional Officer.	Sylhet	South Sylhet	...	...	...	...	...	...	1	16	19	0·62*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
J. A. Ezechiel, Esq., Sub-Divisional Officer.	Ditto	Karimganj	...	...	...	...	...	...	1	56	54	1·49*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
E. C. Hamilton, Esq., Assistant Commissioner.	Kamrup	Gauhati	...	...	3	210	1	3	3	34	31	1·31	30,052	0·02	...	...	...	...	1	...	...	...	...	...	...	0·13	
Babu Madhab Chandra Bardalai, Sub-Divisional Officer.	Ditto	Barpeta	...	...	14	61	18	11	15	168	212	3·19	19,384·18	0·26	...	...	9	3	3	74·22	73·13	2·39	...	...	...	...	
H. A. Colquhoun, Esq., Assistant Commissioner.	Darrang	Tezpur	...	...	10	31	5	5	17	114	74	4·30	6,671	0·41	...	...	...	...	...	...	...	...	...	...	...	...	
D. H. Leese, Esq., Sub-Divisional Officer.	Ditto	Mangaldai	4	3	15	81	52	13	7	53	90	3·27	8,243	0·25	260	240	3	3	2	27·90	26·40	5·37	0·55	...	...	...	
W. A. M. Duncan, Esq., Sub-Divisional Officer.	Sibsagar	Jorhat	4	3	2	73	25	1	4	58	80	1·57	8,823	0·11	...	...	...	...	...	...	...	...	...	...	...	...	
B. C. Allen, Esq., Sub-Divisional Officer.	Ditto	Ditto	4	1	...	73	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
L. J. Kershaw, Esq., Sub-Divisional Officer.	Ditto	Golaghat	...	...	1	52	31	1	1	5	10	0·86	3,685	0·06	...	...	...	...	...	...	...	...	...	...	...	...	
H. C. Barnes, Esq., Assistant Commissioner.	Lakhimpur	Dibrugarh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	45	3	1	5·38	4·38	18·28	...	...	...	...	
F. E. Jackson, Esq., Sub-Divisional Officer.	Ditto	North Lakhimpur.	1	1	3	20	...	3	3	77	97	1·28	2,205·48	0·37	...	...	13	1	1	17·17	15·53	9·55	0·66	...	...	...	

* Lines run in *Rain* Survey.

APPENDIX D.

Work Statement of Sub-Deputy Collectors and Probationers for the year 1896-97.

Name of Sub-Deputy Collector or Probationer.	District.	Sub-division.	AREA CADASTRALLY SURVEYED.													AREA NOT CADASTRALLY SURVEYED.							AREA FOUND WRONGLY CLASSIFIED.			Remarks.
			Number of villages tested.	Total number of mauzals or patwaris.	Number of Mandals or Patwaris.		Testing by check lines.							Testing without check lines.		Number of Mandals.							Extent known as			
					Whose papers were examined.	Whose field work was tested.	Number of lines.	Number of inches.	Number of offsets.	Total length of lines in miles.	Area of fluctuating cultivation in acres.	Number of linear miles per square mile of fluctuating cultivation.	Number of fields tested.	Area tested, in acres.	Total number of mauzals.	Whose papers were examined.	Whose field work was tested.	Total area (in acres) as returned by mauzadars.	Total area (in acres) as found on re-measurement.	Percentage of error in mauzadar's returns.	Area (in acres) of concealed cultivation discovered.	Rupit (acres).	Forest (acres).	Rupit shown as forest (acres).	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Babu Purna Chandra Mitra	Sylhet	Karimganj	42	4	4	...	...	...	...	...	...	...	...	...	64	64	64	...	...	...	...	...	...	...	Tilakaluk and Dhamalasine.
„ Tripura Charan Mukharji	„	„	15	4	4	4	(a) 17	181	239	4·80	...	...	57	...	...	...	...	...	...	...	...	...	...	...	
„ Purna Chandra Mitra	„	North Sylhet.	396	52	43	33	(a) 11	159	235	5·97	2,050·02	1·67	42	459·37	...	...	...	...	...	...	...	...	...	...	
							(c) 169	1,790	1,778	74·24															
Maulvi Faiguddin Ahmed, Probationer.	Goalpara	Dhubri	59	13	13	13	(b) 6	...	...	3·20	4,485	10·59	20	35	19	2	2	31·18	29·96	3·91	...	...	...	...	
							(c) 1	9	19	0·58															
Babu Tripura Charan Mukharji	„	„	13	13	13	13	(a) 13	130	425	7·52	4,485	1·07	...	...	19	...	...	...	...	...	...	...	...	...	
							(c) 80	956	1,208	40·32															
							(b) 9	58	27	3·20															
„ Rajani Kanta Bardalai	Kamrup	Rerpata	74	61	61	52	(c) 5	55	28	1·22	19,334·13	1·24	229	841	9	9	1	45·70	46	0·63	...	440	35	...	
							(d) 1	22	32	0·74															
							(c) 6	130	200	5·46															
							(g) ...	...	...	14·76															
Carried over			699	180	121	112	316	3,590	4,431	162·27	26,369·15	3·24	345	1,329·37	58	17	9	76·88	75·96	4·54	...	440	35	...	

(a) Independent check lines—in cadastral area.
(b) Check lines run over the lines of subordinate officers, in cadastral area.
(c) Independent check lines run in extension survey.
(d) With superior officers in extension survey.
(e) With superior officers in cadastral area.
(f) Lines run in surveying waste land grants.
(g) Lines run in testing the demarcation of special estates.
(h) Check lines run over the lines of subordinate officers, in extension survey.

* *i. e.*, of independent check lines (a) and (c).

APPENDIX D—*concluded.*

Work Statement of Sub-Deputy Collectors and Probationers for the year 1896-97—concluded.

Name of Sub-Deputy Collector or Probationer.	District.	Sub division.	AREA CADASTRALLY SURVEYED.												AREA NOT CADASTRALLY SURVEYED.							AREA FOUND WRONGLY CLASSIFIED.			Remarks.
			Number of villages tested.	Number of mandals or patwaris.	Number of mandals or patwaris.		Testing by check lines.						Testing without check lines.		Number of mandals.			Total area (in acres) as returned by mandals.	Total area (in acres) as found on measurement.	Percentage of error in mandals's papers.	Area (in acres) of cadastral cultivation if incorrect.	Land shown as			
					Whose papers were examined.	Whose field work was tested.	Number of lines.	Number of areas.	Number of offsets.	Total length of lines in miles.	Area of fluctuating cultivation in gantahs.	Number of lines* per square mile of fluctuating cultivation.	Number of fields tested.	Area tested in acres.	Total number of mandals.	Whose papers were examined.	Whose field work was tested.					Rayti (acres).	Faringati (acres).	Rayti shown as faringati (acres).	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Brought forward	...	...	599	130	121	112	316	3,500	4,431	162·27	26,369·15	3·24	348	1,329·37	63	17	9	76·88	75·96	4·54	...	440	35	...	
Babu Bhola Nath Das	Kamrup	Gauhati	87	210	204	66	(a) 95 (b) 1 (c) 1	1,120	1,406	41·02 0·67 0·81	30,052	0·94	481	535·86	20	14	3	154	152	1·30	...	...	...	...	
„ Jajneyar Das Gupta	Darrang	Mangaldai	73	81	81	50	(a) 87 (b) 5 (c) 6 (e) 3 (f) 72 (g) 21	867 76 57 31 ...	1,189 93 73 35 ...	24·96 2·73 2·54 1·30 28·17 76·39	8,248	2·91	23	50·16	3	3	..	...	...	...	...	...	...	...	
„ Krishna Chandra Chaudhuri	„	Tezpur	61	81	81	24	(a) 77 (b) 2 (c) 19	779 33 324	988 42 377	45·78 1·24 13·12	6,671	5·65	150	380·1	24	24	...	...	...	...	...	...	...	...	
„ Radha Mohan Das	Nowgong	Nowgong	148	155	155	96	(a) 81 (b) 26 (c) 10 (d) 7	866 343 71 70	1,211 509 158 80	42·22 16·58 5·07 2·83	44,103	0·69	420	489	11	11	...	...	...	...	21	...	...	...	

Munshi Didaruddin Ahmed	Sibsagar	Golaghat	3	52	3	2	(a) 3	6	37	0·69	8,635†	0·05	26	140	...	...	...	...	...	...	...	...	...	...	† Includes 2,398·90 acres of fluctuating cultivation in the Ahatguri mauza.
							(f) 27	...	...	4·40														
							(a) 60	596	556	27·88														
							(b) 2	37	25	1·80														
Babu Raj Kumar Rai	,,	,,	70	52	52	40	(c) 7	88	73	3·17	8,635†	2·26	855	5,902	3	3	1	1,004	1,880	87·25	876	...	1·28	67·43	‡ Ditto.
							(f) 52	...	...	11·55														
							(g) 108	...	46	41·80														
							(a) 58	555	1,000	27·47														
,, Radha Kanta Handiqui	,,	Jorhat	57	73	73	39	(b) 5	30	79	1·93	8,828	2·12	68	75	4	4	1	...	...	...	...	...	...	...	
							(c) 5	45	83	1·73														
							(g) 141	...	...	40·89														
							(a) 72	303	622	19·53														
Munshi Didaruddin Ahmed	,,	Sadr	93	69	69	17	(b) 4	3	54	1·28	9,338·03	1·34	89	155·70	2	1	...	...	...	...	8·00	...	...	...	
							(f) 109	...	...	7·25														
							(g) 119	...	204	28·76														
							(a) 2	32	22	0·80														
Babu Raj Kumar Rai	,,	,,	4	69	5	3	(c) 3	47	59	1·71	9,333·03	0·17	3	115	...	...	...	...	...	...	...	...	...	...	
							(g) 2	...	...	1·01														
							(a) 34	345	559	12·56														
Maulvi Muhammad Sadiq	Lakhimpur	North Lakhimpur.	65	20	20	18	(c) 2	54	83	1·32	2,205·48	4·03	166	112·40	13	13	9	33·33	40·99	22·70	9·25	...	...	...	
							(f) 3	...	...	1·40														
Munshi Mashiat Ullah	,,	Dibrugarh	32	29	29	22	(a) 15	42	162	3·90	2,252·75	9·86	829	1,115·17	45	3	...	...	...	...	...	...	...	...	
							(c) 87	271	846	30·80														
Babu Hem Chandra Goswami, Probationer.	,,	,,	8	29	14	5	(a) 6	31	63	1·28	2,252·75	0·36	62	522·28	45	5	3	...	...	...	...	...	...	...	
							(f) 74	...	...	15·70														
Total	...	...	1,300	850	840	469	1,824	10,681	15,370	771·11	146,697·41	1·98	3,520	10,932·10	153	95	26	1,268·26	2,148·95	6·94	918·25	440	36·28	67·43	

(a) Independent check lines—in cadastral area.
(b) Check lines run over the lines of subordinate officers, in cadastral area.
(c) Independent check lines run in extension survey.
(d) With superior officers in extension survey.
(e) With superior officers in cadastral area.
(f) Lines run in surveying waste land grants.
(g) Lines run in testing the demarcation of special estates.
(h) Check lines run over the lines of subordinate officers, in extension survey.

* i. e., of independent check lines (a) and (c).

APPENDIX E.

Work Statement of Supervisor Kanungos and Surveyors for the year 1896-97.

Name of Supervisor Kanungo or Surveyor.	Circle.	District.	Sub-division.	AREA CADASTRALLY SURVEYED.																REMARKS.
						NUMBER OF MAUZAS OR PARGANAS		TESTING BY CHECK LINES.									TESTING WITHOUT CHECK LINES.			
				Number of villages tested.	Total number of mauzahs or parganas.	Whose papers were examined.	Whose field work was tested.	Number of lines.	Number of bases.	Number of offsets.	Total length of lines, in miles.	Area of fluctuating cultivation, in acres.	Number of lines in which fluctuating cultivation occurs.	Number of fields tested.	Area tested, in acres.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17				
Binod Behari Chaudhuri	Hailakandi	Cachar	Hailakandi	13	15	15	15	10	109	216	4·58	...	...	216	334					
Gopi Charan Dey	Katigara (I)	,,	Silchar	115	8	8	8	401	113	588	38·50	...	...	4,919	215					
Kamini Kumar De	,, (II)	,,	,,	...	8	...	...	...	...	...	...	...	...	...	...					
Brajendra Kishore Das	,,	,,	,,	69	8	8	8	131	77	28	9·37	...	...	1,768	...					
Sambhu Ram Das	Silchar	,,	,,	...	7	...	...	...	...	...	...	...	...	...	...					
Dina Nath Ghose	Chatla Haor	,,	,,	11	10	3	5	18	113	108	6·27	...	...	27	31					
Sasi Kumar Kar	Circle No. I	Sylhet	North Sylhet	(a) 180	16	16	16	4	8	6	1	85·95	7·45	28	1,828					
Kamini Kumar De	,, II	,,	,, ,,	(a) 127	10	10	10	112	803	1,592	53·55	814·76	42·06	1,909	10,499·50					
Abdus Sabur	,, III	,,	,, ,,	(a) 132	14	14	14	62	511	1,011	22·76	790·67	19·93	49	17,547					
Ambika Charan Banarji	,, IV	,,	,, ,,	(a) 105	12	12	12	73	784	532	23·28	413·81	36·37	121	2,305·25					
Rati Ram Das	Bijni	Goalpara	Dhubri	(a) 53	13	13	13	104	974	1,868	50·66	4,435	7·23	501	2,500					
Jay Ram Deka	Bajali	Kamrup	Barpeta	(a) 136	22	22	22	121	1,333	2,284	64·42	3,902·61	10·57	5,781	6,395					
Purna Nanda (offg.)	,,	,,	,,	(a) 13		...	3	11	132	241	4·77		0·78	312	122					
Basir Ali Biswas	Barpeta	,,	,,	(a) 101	20	20	20	111	1,095	1,260	43·05	7,638·44	7·68	1,364	318					
Elias (Munshi) (offg.)	,,	,,	,,	(b) 12		1	1	11	116	108	4·33			...	...					
				(c) 64		...	20	71	1,006	1,576	41·72			2,730	1,170					
				(a) 70	19	19	19	110	1,354	2,062	50·05			2,330	4,973					
Bhagirath Deka	Roha	,,	,,	(b) 40		...	3	5	60	93	2·40	8,293·08	4·51	...	...					
				(c) 3		...	3	2	30	62	1·16			...	...					
Nityananda	Boltala	,,	Gauhati	(a) 54	13	13	13	38	365	308	16·52	1,154	9·16	2,931	3,847·93					
Kan Nath Das	Palasbari	,,	,,	(a) 140	31	31	31	86	1,472	1,521	53·09	4,493	7·56	8,095	4,906					
				(c) 7		...	6	25	112	127	8·46			...	...					
				(a) 89	28	28	28	83	975	1,368	47·21	6,150	5·12	13,511	48,161·01	*				
Rangdev Sarma	Boko	,,	,,	(b) 8		2	2	5	69	97	2·29			900	327·54					
				(c) 13		...	...	10	100	93	5·69			656	6,976·93					
				(a) 59	20	...	...	49	371	331	13·29	2,446	14·02	5,085	2,642·51					
Bati Ram Das	Patidarrang	,,	,,	(b) 4		...	...	4	25	35	1·52			270	42·40					
				(c) 32		20	20	63	462	388	16·83			...	...					
Nara Nath (offg.)	,,	,,	,,	(a) 78	31	21	15	87	1,416	1,534	49·39	3,953	13·05	3,566	2,453·38					
Jiu Ram Das	Hajo	,,	,,	(a) 10		21	6	17	376	483	10·80			...	...					
Chini Ram Das (offg.)	,,	,,	,,	(a) 103	17	17	17	193	1,950	2,671	71·48	6,123	7·47	1,725	316·52					
Mohan Chandra Bora	Barkhetri	,,	,,																	

Dhaneswar Dass (offg.)		Baripgo					(a)	10	14	14	7	43	380	804	16·34	1,619	12·49	352	212
Tita Ram Das		,,		,,		,,	(a)	15			11	34	497	559	15·28			1,985	1,668
Mantam Ram Das		Paduari		,,		,,	(a)	11	12	12	8	16	154	240	6·96	976	7·38	22	8·39
Lalit Ram Das (offg.)		,,		,,		,,	(a)	5			6	13	96	133	4·30			468	359·12
Santi Ram Das		Nalbari		,,		,,	(a)	32	19	19	19	36	363	387	11·85	766	15·07	11,265	2,481·20
Nao Ram Das (offg.)		,,		,,		,,	(a)	6			3	18	169	233	6·19			...	...
Jagat Ram Das		Tambulpur		,,		,,	(a)	48	17	5	24	72	745	1,110	51·93	2,822	14·21	1,452	2,030·33
							(c)	2			2	3	28	40	1·78			...	...
Madhab Ram Gagai		Baroma		,,		,,	(a)	55	19	18	18	97	701	629	51	2,020	16·15	3,475	3,326
Chandra Kanta Sarkar		Sipajhar		Darrang		Mangaldai	(a)	74	20	20	20	122	1,141	2,009	49·39	2,135	10·20	260	169
Saru Ram Das (offg.)		,,		,,		,,	(a)	11			7	2	15	18	0·57			376	290
							(c)	...			10	95	96	4·07				...	...
Kalamani Das		Mangaldai		,,		,,	(a)	34	23	23	17	60	344	637	27·29	1,965	16·04	230	312·43
Manu Ram Das (offg.)		,,		,,		,,	(a)	53			28	142	341	884	17·93			353	530·16
							(b)	...			...	6	28	80	2 26			...	...
Jajna Ram Saharia		Kalaigaon		,,		,,	(a)	16	22	22	4	32	17	88	6·10	1,523	11·34	186	112
Babu Ram Das (offg.)		,,		,,		,,	(a)	1			1	1	1	9	0·70			...	...
Rammal Das (offg.)		,,		,,		,,	(a)	52			22	46	216	351	20·30			2,143	1,373
							(c)	...			...	6	31	64	1·40			...	...
Bahu Ram Das		Benghari		,,		,,	(a)	47	16	16	16	29	155	337	12·46	1,625	14·34	1,358	710
							(b)	...			...	9	51	80	3·46			...	...
Rammal Das (offg.)		,,		,,		,,	(a)	60			16	34	179	338	19·43			1,092	705
							(b)	...			...	2	11	10	1·01			...	...
Durga Ram Datta		Western Circle		,,		Tezpur	(a)	71	10	10	10	68	567	1,031	37·32	2,416	10·33	1,691	1,557
							(b)	...			...	1	19	23	1·17			...	...
							(c)	...			...	13	140	207	7·99			...	...
Ganga Ram Das		Eastern Circle		,,		,,	(b)	12	21	13	37	357	644	13 50		4,255	9·84	86	79
Nandi Nath Sarma (offg.)		,,		,,		,,	(a)	68	21	21	13	173	501	1,123	61·95			967	685
							(c)	...			...	46	432	392	26·77			...	...
Uma Kanta Sarma		Town		Nowgong		Nowgong	...	...	...	...	...	...	...	...	...	...	...	...	...
Gajendra Narayan Das (offg.)		,,		,,		,,	(a)	64	19	20	20	59	814	1,315	31·33	7,758	9·95	2,338	1,810
Pua Ram Mahanta (offg.)		,,		,,		,,	(a)	22			29	17	38	340	516	16·63		952	3,398
Ram Rath Datta		Silghat		,,		,,	(a)	77	20	20	20	62	745	1,286	32·96	4,117	5·85	1,425	1,186
							(b)	3				13	110	104	4·67			63	59
Danpati Das		Doboka		,,		,,	(a)	54	18	18	18	70	895	1,395	27·70	7,782	3·97	600	84
Tara Nath Bora (offg.)		,,		,,		,,	(a)	16	18	11	11	13	160	225	6·61			...	...
							(b)	...			...	7	90	120	4·00			...	...
Sib Nath Sarma		Roha		,,		,,	(a)	119	21	21	21	206	2,169	3,207	88·00	3,697	16·65	733	866
Govinda Ram Datta		Dhing		,,		,,	(a)	95	22	22	22	137	1,631	2,954	72 66	8,568	5·43	1,263	1,651
							(a)	32				27	298	492	14·96			...	...
Gopal Chandra Goswani		Gerna		,,		,,	(b)	1				9	91	108	4·33			...	...
							(c)	...				1	11	23	1·95			...	...
							(a)	54	17	17	17	71	819	1,336	42·73	5,510	7·80	205	137
Surath Chandra Bora (offg.)		,,		,,		,,	(b)	5				6	63	77	4·13			...	...
							(c)	...				5	55	64	3·02			...	...
Lakhi Ram Das		Ghugua		,,		,,	(a)	116	18	18	18	133	1,070	1,939	58·62	4,459	8·80	1,395	1,884
Danpati Das (offg.)		,,		,,		,,	(a)	3				4	70	148	2·62			64	121
Tita Ram Gagai		Mayang		,,		,,	(a)	41	10	10	10	8	57	103	3·40			450	...
Durga Ram Das (offg.)		,,		,,		,,	(a)	29	10	5	5	30	241	375	12 09	2,312	5·12	...	245
Gajendra Narayan Das (offg.)		,,		,,		,,	(a)	2			2	6	68	74	3·01			60	...
Manu Ram Talukdar		Northern Circle		Sibsagar		Golaghat	(a)	63	25	25	25	61	574	1,062	29·38	...	...	...	...
							(b)	...				15	...	...	1·89				
							(a)	68	21	21	21	76	429	655	28·29	2,359·89	12·11	4,671	5,489
Pua Ram Mahanta		Southern Circle				,,	(b)	5	21	...	5	6	71	76	4·11			...	...
Bhakat Ram Datta (offg.)		,,		,,		,,	(a)	33		21	17	17	129	137	6·78			746	815

Work Statement of Supervisor Kanungos and Surveyors for the year 1896-97—concluded.

Name of Supervisor Kanungo or Surveyor.	Circle.	District.	Sub-division.	AREA CADASTRALLY SURVEYED.												TESTING WITHOUT CHECK LINES.		Remarks.
				Number of villages tested.	Total number of mauzas tested.	Number of Mandals or Patwaris— Whose papers were examined.	Number of Mandals or Patwaris— Whose field-work was tested.	TESTING BY CHECK LINES. Number of lines.	Number of salems.	Number of offsets.	Total length of lines, in miles.	Area of fluctuating cultivation, in acres.	Number of linear miles per square mile of fluctuating cultivation.	Number of fields tested.	Area tested, in acres.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Bhola Ram Datta	Eastern Circle	Sibsagar	Jorhat	(a) 55 (b) 7	19	19	19	93 14	677 182	1,296 315	37·49 8·16	1,842	15·66	461 21	281 8		
Mahi Ram Das	North-Western Circle	,,	,,	(a) 27 (b) 15	23	23	23	39 28	309 234	887 689	18·19 13·93	2,181·90	9·42	3,663 69	1,695 60		
Kati Ram Das	South-Western Circle	,,	,,	(a) 64	18	18	18	94	721	1,093	41·64	1,840	14·48	2,472	1,606		
Mina Ram Das	Majuli	,,	,,	(a) 107	19	19	19	134	1,217	2,033	49·84	5,338*	5·98	1,430	1,445		*Includes 2,336·90 acres of the Abaduri Mauza in the Golaghat Sub-division.
Sib Ram Bora	Eastern Circle	,,	Sadr	(a) 106 (b) 3	25	25	24	101 48	951 ...	2,269 ...	43·13 8·80	3,058·16	11·27	2,928 1,701	10,250·27 902·70		
Govinda Nath Ray	Central Circle	,,	,,	(a) 84	20	20	20	86	772	1,080	40·53	3,314·61	8·07	...	...		
Malbhog Gegai (offg.)	,,	,,	,,	(b) 3		...	3	8	27	63	1·28			3,707	8,048·08		
Lalit Ram Chaudhuri	Western Circle	,,	,,	(a) 104	24	24	20	68	544	905	23·41	2,960·26	7·26	76	77·40		
Trabi Ram Bairagi (offg.)	,,	,,	,,	(a) 20		...	15	24	232	609	10·21			1,013	2,278·12		
Jagan Nath Deka	North Lakhimpur	Lakhimpur	North Lakhimpur	(a) 72 (b) 4	20	19 1	17 3	68 14	585 209	930 376	30·07 6·38	2,205·48	15·04	61	...		
Bhabi Ram Das (offg.)	,,	,,	,,	(a) 7		20	9	9	78	145	15·38			457	278·62		
Maheswar Das	Dibrugarh	,,	Dibrugarh	(a) 70 (b) 3	15	13	13	39 3	335 25	480 53	12·36 0·85	614·74	13·09	740 ...	1,550 ...		
Janardan Sarma (offg.)	,,	,,	,,	(a) 20		15	15	1	5	12	0·22			...	...		
Lakhmi Kanta Das	Chabua	,,	,,	(a) 29	14	14	14	55	352	657	18·91	1,638·01	7·39	223	1,222·89		
Samudra Narayan Das, Surveyor	...	Kamrup	Gauhati	(a) 71	210	21	43	63	967	901	35·75	80,063	0·76	891	1,202·56		No testing done in Cadastrally surveyed area.
Mazaffar Ali, Surveyor	...	Lakhimpur	Dibrugarh	...	...	...	...	...	...	...	...	...	...	...	...		

(a) Independent check lines in cadastral area.
(b) ,, ,, ,, extension survey.
(c) With superior officers in cadastral area.
(d) ,, ,, ,, extension survey.

APPENDIX F.

Work Statement of Tahsildars for the year 1896-97.

Name of Tahsildar.	Name of tahsil.	District.	Sub-division.	AREA CADASTRALLY SURVEYED.												AREA NOT CADASTRALLY SURVEYED.							AREA IN ACRES) FOUND WRONGLY CLASSIFIED.			REMARKS.
				Number of villages tested.	NUMBER OF MAHALS OR PATTAHIS: Total number of mahals or pattaahis.	NUMBER OF MAHALS OR PATTAHIS: Whose papers were examined.	Whose field work was tested.	TESTING BY CHECK LINES: Number of lines.	TESTING BY CHECK LINES: Number of *kotans*.	TESTING BY CHECK LINES: Number of offsets.	TESTING BY CHECK LINES: Total length of lines in miles.	TESTING BY CHECK LINES: Area of fluctuating cultivation in jurisdiction, in acres.	TESTING BY CHECK LINES: Number of lines per square mile of fluctuating cultivation.	TESTING WITHOUT CHECK-LINES: Number of fields tested.	TESTING WITHOUT CHECK-LINES: Area tested (in acres).	Total number of mahals.	NUMBER OF MAHALS: Whose papers were examined.	NUMBER OF MAHALS: Whose field work was tested.	Total area as returned by mamlatdars, in acres.	Total area as found on re-measurement, in acres.	Percentage of error, in mamlatdar's papers.	Area of concealed cultivation discovered, in acres.	*Kharif* (acres).	*Rabi* (acres).	*Fariqanti* (acres).	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Hara Narayan Sen, Nath Tahsildar	Kanaighat,	Sylhet	North Sylhet,	...	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	No testing done by the Tahsildar.
Ratan Ali Sarkar, Sitto	Sadr	"	"	13	36	11	5	13	67	39	7·67	1,864·14	2·60	...	...	...	...	...	...	...	...	...	...	...	...	
Nilamani Chandra Mukharji	Bijni	Goalpara	Dhubri	3	13	13	5	5	173	78	29·30	4,485	0·47	...	6	25	3	3	...	5	5	...	11	...	...	...	
Banga Chandra Chaudhuri	Bajali	Kamrup	Barpeta	31	31	21	17	26	226	402	11·64	2,191·94	2·33	678	1,372·3	...	...	...	...	...	...	2·72	...	...	1·71	16·47
Kesab Chandra Singh	Boha	"	"	23	16	6	16	65	464	726	32·77	7,009·47	2·30	324	3,110·64	...	...	...	...	...	...	...	...	...	...	
Muhammad Eunus Ali	Gauhati	"	Gauhati	1	1	1	1	1	20	21	0·61	1,154	3·69	71	304·80	5	1	1	1,323·10	1,323·02	0·01	...	...	...	...	
Chief Ram Chandhuri (offg.)	"	"	"	1	13	4	6	13	227	113	6·14	1,154	1·96	71	304·80	5	1	1	1,323·10	1,323·02	0·01	...	...	...	...	
Syam Lall Chaudhuri	"	Palasbari	"	11	23	...	10	19	199	303	6·95	3,215	1·26	411	695	1	1	1	345·93	353·24	2·74	...	...	...	...	
Ganga Ram Das	"	Boko	"	12	23	23	17	24	279	310	14·93	2,151	1·28	963	1,926	2	6	...	...	...	...	...	...	...	19·22	
Mohammad Eunus Ali (offg.)	"	...	"	2	6	5	5	10	57	72	2·70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Ratna Kanta Barua	"	Patidarrang	"	7	20	12	7	6	79	47	2·29	1,446	1·01	1,089	785·79	...	...	...	...	...	...	...	...	...	...	
Uday Chandra Barua	"	Mangaldai	"	3	39	35	3	2	44	29	1·14	2,070	0·29	...	...	...	...	...	...	...	...	...	...	...	...	
Soos Ram Das (offg.)	"	...	"	6	...	...	4	9	144	141	4·40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Bangshidhar Barua	"	Nalbari	"	6	19	6	12	11	211	238	6·75	766	4·32	725	537·65	...	...	...	...	...	...	...	...	...	...	
Joy Ram Bhuyan	"	Tamulpur	"	36	17	...	17	38	628	693	21·90	2,322	6·04	831	1,990·94	3	...	3	380·66	380·62	0·12	26	6·54	909	22·28	
Gangia Ram Das	"	Baruna	"	5	18	18	5	9	116	74	6·39	2,020	1·67	63	2,088	...	...	...	...	...	...	...	...	...	...	
Kali Ram Chaudhuri	"	Chhaygaon	"	5	9	2	4	13	233	265	8·70	1,227	4·56	5	3	...	91	100	9·29	...	...	...	...	...	...	
Radha Nath Barua	"	Rangiya	"	14	29	23	14	29	255	458	10·29	2,595	3·64	30	78·4	...	...	...	...	...	...	...	...	...	...	
Dhanmidhar Barua	"	Kalaigaon	Darrang	16	24	24	14	30	160	278	12·31	2,483	2·18	500	986	...	...	...	...	...	...	...	...	...	...	
Bhabani Charan Sarma	"	Pathariaghat	"	4	20	20	2	7	56	84	1·99	3,135	0·40	4	103	...	...	...	...	...	...	...	...	...	...	
Sita Nath Sahstia	"	Mangaldai	"	29	12	12	9	19	196	120	2·26	1,535	1·37	727	496	3	3	2	195	203	3·16	0·46	...	...	...	
Ravi Charan Sarma	"	Tezpur	"	21	10	9	7	20	138	218	9·43	2,343	2·38	345	510·80	5	5	3	577	625	7·68	...	...	...	...	
Ganga Nath Sarma	"	Ghilla	"	3	13	6	3	4	49	52	2·00	2,055	0·29	488	524·21	4	2	4	580	693	22·29	...	...	...	...	
Bedra Nath Barua	"	Boha	Nowgong	13	21	21	11	17	193	527	5·03	3,628	0·93	451	343	2	2	2	...	...	...	...	...	...	...	
Chandra Kanta Baruá	"	Samaguri	"	90	14	14	8	3	20	43	0·69	2,891	0·18	433	202	1	1	1	...	...	...	...	1	...	1	
Santi Ram Hazarika	"	Sadr	"	3	16	10	2	1	20	11	0·30	5,803	0·05	118	109	...	...	...	...	...	...	...	...	...	...	
Dandadhar Baruá	"	Golaghat	Golaghat	5	14	14	4	8	63	133	1·75	1,754	0·63	86	125	1	1	1	3·93	2·92	0·07	...	...	...	...	
Guru Prosad Kakati	"	Athgaon	"	3	12	12	3	6	97	86	2·22	1,024	1·36	1	...	3	3	1	9·52	9·92	1·68	...	...	...	...	
Bistu Ram Baruá	"	Jorhat	"	6	18	18	4	6	93	183	2·93	1,174	1·69	...	...	...	...	...	...	...	...	...	...	...	...	
Durga Pro sad Dutta Baruá	"	Nonidiai	"	2	24	...	2	6	61	141	2·39	2,960·28	0·24	...	...	...	...	...	...	...	...	...	...	...	...	
Satyadhar Dutta Baruá (offg.)	"	...	"	2		...	2	11	49	136	2·39			...	...	...	...	...	...	...	...	...	...	...	...	
Durga Prosad Dutta Baruá	"	Sibsagar	"	...		...	5	11	69	81	0·32			...	...	...	...	...	...	...	...	...	...	...	...	
Someswar Sarma Baruá (offg.)	"	...	"	16		...	12	19	136	179	2·81	2,622	3·68	...	...	...	...	...	...	...	...	...	...	...	...	
Padma Nath Baruá	"	Dibrugarh	Lakhimpur,	2	15	2	2	7	25	25	0·39	6174	0·22	...	...	4	1	1	67·67	64·88	12·54	...	...	2	...	
TOTAL	...	...	...	390	559	347	215	456	4,611	6,667	201·42	83,561·85	1·53	9,030	17,000	46	32	27	5,966·35	6,969·13	3·09	29·18	0·54	913·71	55·55	

APPENDIX G.

Work Statement of Mauzadars and Tahsil Muharrirs for the year 1896-97.

District.	Sub-division.	Total number of mauzadars and muharrirs who did any work.	AREA CADASTRALLY SURVEYED.												AREA NOT CADASTRALLY SURVEYED.							AREA (IN ACRES) FOUND WRONGLY CLASSIFIED.			Remarks.
			Number of villages tested.	Total number of mahals.	Number of mauzadars whose papers were examined.	Number of mauzadars whose field work was tested.	Testing between lines.						Testing without check lines.		Number of mauzadars.	Number of mauzadars whose papers were examined.	Number of mauzadars whose field work was tested.	Total area in acres as returned by mauzadars.	Total area in acres found on re-measurement.	Percentage of error in mauzadar's papers.	Area in acres of concealed cultivation discovered.	Land shown as		Land shown as *Sheriyati* (acres).	
							Number of lines.	Number of *kadams*.	Number of *ots*.	Total length of lines, in miles.	Area of fascimiling cultivation in jurisdiction, in acres.	Number of lines with fascimiling cultivation.	Number of fields tested.	Area tested, in acres.								*Kayti* (acres).	*Pardesi* (acres).		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		25	26
Kamrup	Gauhati	1	6	5	4	4	6	62	55	2·52	609	2·65	126	103	1	1	...	...	...	...	...	...	...	...	
,,	Barpeta	7	53	25	9	22	69	1,058	1,128	36·06	9,641	2·39	2,004	542	9	7	9	6,197·67	6,270·10	1·15	...	...	...	...	
Darrang	Mangaldai	10	41	65	40	18	55	336	645	32·94	8,248	2·55	1,059	2,571	3	3	3	186	214	15·05	12	...	1·00	...	
,,	Sadr	5	27	31	16	10	14	77	171	8·09	6,671	0·77	706	3,313	24	9	...	...	...	...	...	...	...	...	
Nowgong	Nowgong	9	49	75	40	27	55	558	978	25·21	17,441	0·92	1,178	1,403	6	6	6	454	457	0·66	8	...	...	...	
Sibsagar	Golaghat	3	13	11	6	7	30	192	229	5·41	1,697	2·04	165	1,476·54	1	1	1	49·94	50·67	1·26	6·06	...	...	...	
,,	Jorhat	10	33	47	42	23	(a) 28 (b) 1 (c) 12	235 9 99	347 16 103	11·44 0·38 6·39	6,345	1·79	636	355	6	5	4	155	168	8·39	4	...	...	3	
,,	Sadr	3	18	11	7	8	28	247	285	12·62	1,403·71	5·75	9	15	...	...	...	...	...	...	...	...	...	...	
Lakhimpur	Sadr	2	18	6	6	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	
,,	North Lakhimpur.	6	29	14	11	12	19	229	333	6·29	2,206	1·83	698	296	4	2	3	68	67	1·47	...	...	...	...	
Total		56	287	290	181	131	316	3,101	4,290	147·35	54,261·71	1·73	6,576	10,074·54	56	29	26	7,110·61	7,226·67	1·63	30·06	...	1·00	3	

(a) Independent check lines in cadastral area.
(b) With superior officers in cadastral area.
(c) Independent check lines in extension survey.

APPENDIX H.

Statement showing the condition of Survey marks on the 30th June 1896.

Sub-division.	Classification.	Total number (columns 6+7+8).	Total number found in good order by mandals or patwaris.	TOTAL NUMBER FOUND NOT IN GOOD ORDER BY MANDALS OR PATWARIS.		Total of columns 4 and 5 or total in good order on 30th June 1896.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
Barpeta	(a) Trijunction prisms	911	870	35	...	905	6
	(b) Traverse stations shown by mounds and *simul* boughs.	5,781	2,557	2,639	441	5,196	94
	(c) Kanungo's mounds, including jungle mounds.	1,195	471	674	45	1,145	5
	(d) Prisms on boundaries of grants, etc.	263	263	...	...	263	...
	(e) Concrete blocks ditto	863	792	71	...	863	...
	(f) Country stones ditto	1,534	1,534	...	...	1,534	...
	(g) Mounds ditto	230	187	25	18	212	...
	Total Barpeta	10,727	6,674	3,444	504	10,118	105
Gauhati	(a) Trijunction prisms	2,911	2,831	34	8	2,865	38
	(b) Traverse stations shown by mounds and *simul* boughs.	5,227	2,425	2,123	525	4,548	154
	(c) Kanungo's mounds, including jungle mounds.	4,192	2,214	1,511	273	3,725	94
	(d) Prisms on boundaries of grants, etc.	3,362	3,321	20	18	3,341	3
	(e) Concrete blocks ditto	5,733	5,225	502	6	5,727	...
	(f) Country stones ditto	6,916	6,908	2	...	6,910	6
	(g) Mounds ditto	1,422	1,229	116	58	1,345	19
	Total Gauhati	29,763	24,153	4,308	988	28,461	314
Mangaldai	(a) Trijunction prisms	1,460	1,449	...	...	1,449	11
	(b) Traverse stations shown by mounds and *simul* boughs.	6,666	4,102	2,253	192	6,355	119
	(c) Kanungo's mounds, including jungle mounds.	131	131	...	...	131	...
	(d) Prisms on boundaries of grants, etc.	336	336	...	...	336	...
	(e) Concrete blocks ditto	130	130	...	...	130	...
	(f) Country stones ditto	120	120	...	...	120	...
	(g) Mounds ditto	50	...	...	50	...	...
	Total Mangaldai	8,893	6,268	2,253	242	8,521	130

APPENDIX H—*continued.*

Statement showing the condition of Survey marks on the 30th June 1896—continued.

Sub-division.	Classification.	Total number (columns 6+7+8).	Total number found in good order by mandals or patwaris.	TOTAL NUMBER FOUND NOT IN GOOD ORDER BY MANDALS OR PATWARIS.		Total of columns 4 and 5 or total in good order on 30th June 1896.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
Tezpur	(a) Trijunction prisms	387	284	89	10	373	4
	(b) Traverse stations shown by mounds and *simul* boughs.	2,134	1,159	893	43	2,052	39
	(c) Kanungo's mounds, including jungle mounds.	263	126	103	25	234	7
	(d) Prisms on boundaries of grants, etc.	...	...	...	...	...	...
	(e) Concrete blocks ditto	...	...	...	...	...	...
	(f) Country stones ditto	...	...	...	...	...	...
	(g) Mounds ditto	...	...	...	...	...	...
	Total Tezpur	2,784	1,569	1,090	78	2,659	47
Newgong	(a) Trijunction prisms	2,169	1,735	392	36	2,127	...
	(b) Traverse stations shown by mounds and *simul* boughs.	13,043	5,134	6,750	1,034	11,934	75
	(c) Kanungo's mounds, including jungle mounds.	378	155	213	10	368	...
	(d) Prisms on boundaries of grants, etc.	516	503	13	...	516	...
	(e) Concrete blocks ditto	193	128	65	...	193	...
	(f) Country stones ditto	238	238	...	...	238	...
	(g) Mounds ditto	882	681	31	170	712	...
	Total Newgong	17,413	6,624	7,464	1,250	16,088	75
Golaghat	(a) Trijunction prisms	576	567	...	9	567	...
	(b) Traverse stations shown by mounds and *simul* boughs.	5,881	1,824	2,900	1,091	4,724	66
	(c) Kanungo's mounds, including jungle mounds.	142	76	59	7	135	...
	(d) Prisms on boundaries of grants, etc.	188	188	...	...	188	...
	(e) Concrete blocks ditto	953	953	...	...	953	...
	(f) Country stones ditto	...	...	...	...	...	...
	(g) Mounds ditto	75	75	...	...	75	...
	Total Golaghat	7,815	3,683	2,959	1,107	6,642	66

APPENDIX H—*continued.*

Statement showing the condition of Survey marks on the 30th June 1896—continued.

Sub-division.	Classification.	Total number (columns 6+7+8).	Total number found in good order by mandals or patwaris.	TOTAL NUMBER FOUND NOT IN GOOD ORDER BY MANDALS OR PATWARIS.		Total of columns 4 and 5 or total in good order on 30th June 1896.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
Jorhat	(a) Trijunction prisms	1,039	985	45	7	1,030	2
	(b) Traverse stations shown by mounds and *simul* boughs.	10,915	3,449	4,022	1,956	7,471	1,488
	(c) Kanungo's mounds, including jungle mounds.	308	91	185	32	276	...
	(d) Prisms on boundaries of grants, etc.	...	...	...	...	...	...
	(e) Concrete blocks ditto	...	...	...	...	...	...
	(f) Country stones ditto	...	...	...	...	...	...
	(g) Mounds ditto	...	...	...	...	...	...
	Total Jorhat	12,262	4,525	4,252	1,995	8,777	1,490
Sibsagar Sadr	(a) Trijunction prisms	977	897	28	44	925	8
	(b) Traverse stations shown by mounds and *simul* boughs.	11,737	5,036	3,688	1,801	8,723	1,213
	(c) Kanungo's mounds, including jungle mounds.	107	32	66	9	98	...
	(d) Prisms on boundaries of grants, etc.	...	...	...	...	...	...
	(e) Concrete blocks ditto	...	...	...	...	...	...
	(f) Country stones ditto	...	...	...	...	...	...
	(g) Mounds ditto	266	247	...	19	247	...
	Total Sibsagar Sadr	13,087	6,211	3,782	1,873	9,993	1,221
Dibrugarh	(a) Trijunction prisms	366	332	28	5	360	1
	(b) Traverse stations shown by mounds and *simul* boughs.	2,950	1,375	1,249	309	2,624	17
	(c) Kanungo's mounds, including jungle mounds.	126	90	34	2	124	...
	(d) Prisms on boundaries of grants, etc.	46	...	28	18	28	...
	(e) Concrete blocks ditto	859	...	605	254	605	...
	(f) Country stones ditto	...	...	...	...	...	...
	(g) Mounds ditto	...	...	...	...	...	...
	Total Dibrugarh	4,347	1,797	1,944	588	3,741	18

APPENDIX H—*concluded.*

Statement showing the condition of Survey marks on the 30th June 1896—concluded.

Sub-division.	Classification.	Total number (columns 6+7+8).	Total number found in good order by mandals or patwaris.	Total number found not in good order by mandals or patwaris.		Total of columns 4 and 5 or total in good order on 30th June 1896.	Number lost or left unvisited.
				Repaired.	Not repaired.		
1	2	3	4	5	6	7	8
North Lakhimpur	(*a*) Trijunction prisms	191	191	...	...	191	...
	(*b*) Traverse stations shown by mounds and *simul* boughs.	1,551	691	820	40	1,511	...
	(*c*) Kanungo's mounds, including jungle mounds.	50	16	34	...	50	...
	(*d*) Prisms on boundaries of grants, etc.	...	...	...	...	...	...
	(*e*) Concrete blocks ditto	...	...	...	...	...	...
	(*f*) Country stones ditto	...	...	...	...	...	...
	(*g*) Mounds ditto	...	...	...	...	...	...
	Total North Lakhimpur	1,792	898	854	40	1,752	...
Karimganj	(*a*) Trijunction prisms	100	95	1	...	96	4
	(*b*) Traverse stations shown by mounds and *simul* boughs.	4,179	720	2,100	1,199	2,820	160
	(*c*) Prisms on boundaries of grants, etc.	124	112	1	7	113	4
	(*d*) Brick pillars ditto	152	63	89	...	152	...
	(*e*) Country stones ditto	97	55	...	42	55	...
	(*f*) Pipes ditto	53	14	25	8	39	5
	(*g*) Mounds ditto	...	...	...	...	...	...
	Total Karimganj	4,704	1,059	2,216	1,256	3,275	173
Goalpara	(*a*) Trijunction prisms	...	...	...	...	...	...
	(*b*) Traverse stations shown by mounds and *simul* boughs.	741	192	541	...	733	8
	(*c*) Kanungo's mounds including jungle mounds.	...	...	...	...	...	...
	(*d*) Prisms on boundaries of grants, etc.	...	...	...	...	...	...
	(*e*) Concrete blocks ditto	...	...	...	...	...	...
	(*f*) Country stones ditto	...	...	...	...	...	...
	(*g*) Mounds ditto	...	...	...	...	...	...
	Total Goalpara	741	192	541	...	733	8
Total	(*a*) Trijunction prisms	11,081	10,236	652	119	10,888	74
	(*b*) Traverse stations shown by mounds and *simul* boughs.	70,755	28,713	39,978	8,631	68,691	3,432
	(*c*) Kanungo's mounds including jungle mounds.	6,892	3,402	2,884	503	6,286	103
	(*d*) Prisms on boundaries of grants, etc.	4,835	4,723	62	43	4,785	7
	(*e*) Concrete blocks ditto	8,883	7,291	1,332	260	8,623	...
	(*f*) Country stones ditto	8,957	8,869	27	50	8,896	11
	(*g*) Mounds ditto	2,925	2,419	172	315	2,591	19
	Grand Total	1,14,328	65,653	35,107	9,921	1,00,760	3,647

APPENDIX I.

Statement showing the area of each Supervisor Kanungo's circle in the cadastrally surveyed portion of the Province.

Sub-division.	Name of Kanungo's circle.	*Nisf-khiraj.*	*Lakhiraj.*	Permanently settled.	*Khiraj* settled.	*Khiraj* unsettled.	Grants.	Total.	Number of mandals' or patwaris' circles.
		Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.	
Hailakandi	Hailakandi	...	0·72	...	63·39	20·64	34·29	119·04	15
Silchar	East Katigora	...	0·14	...	34·85	16·80	3·23	55·72	8
	West Katigora	...	0·19	...	31·76	28·31	9·41	70·17	8
	Silchar	0·09	...	...	32·19	16·89	18·87	68·04	7
	Jainagar	...	1·32	...	38·68	19·89	67·55	127·44	12
	Chatla Haor	...	...	...	20·68	45·42	52·99	119·09	10
	Total Silchar	...	1·74	...	158·16	127·31	152·75	440·46	45
	Total Cachar	...	2·46	...	221·55	148·45	187·04	559·50	60
*Karimganj	Pratabgarh	...	...	...	30·49	28·74	59·85	119·08	4
North Sylhet (Jaintia).	Kanairghat	...	1·17	1·97	102·26	16·76	6·80	128·96	16
	Kharil	0·46	0·18	66·02	37·83	0·06	104·55	10	
	Araikhan	...	2·14	0·95	79·73	49·82	2·65	142·29	14
	Guainghat	...	0·43	0·13	62·89	42·03	2·98	108·46	12
	Total Jaintia	...	11·20	3·23	310·90	146·44	12·49	484·26	52
	Total Sylhet	...	11·20	3·23	341·39	175·18	72·34	603·34	56
Dhubri	Bijni	...	...	...	32·43	99·31	...	131·74	13
Barpeta	Bajali	22·82	0·71	...	92·14	74·25	...	189·92	22
	Barpeta	8·44	0·77	...	30·22	108·43	...	147·86	20
	Roha	22·21	0·20	...	36·26	179·29	...	239·26	19
	Total	53·47	1·68	...	129·32	362·57	...	547·04	61
Gauhati	Beltola	3·16	0·56	...	27·55	54·10	1·81	87·18	13
	Palasbari	10·86	2·49	...	97·77	57·26	1·58	169·96	31
	Boko	1·15	1·16	...	24·10	145·83	...	182·24	28
	Hajo	28·57	19·62	...	48·89	37·43	1·57	136·18	21
	Barkhetri	8·41	0·49	...	32·66	43·18	...	79·74	17
	Barigog	24·55	1·19	...	33·24	43·01	...	101·99	14
	Panduri	24·56	2·84	...	55·90	27·60	0·71	91·51	12
	Nalbari	23·46	1·45	...	77·69	14·72	0·72	117·94	19
	Tamulpur	4·16	0·15	...	41·85	120·01	0·68	167·15	17
	Barama	14·96	3·36	...	55·29	66·43	...	140·04	18
	Patidarrang	39·82	10·79	...	54·30	39·97	0·80	145·68	20
	Total	178·66	44·40	...	538·04	649·59	7·87	1,419·56	210
	Total Kamrup	232·13	46·08	...	668·36	1,012·16	7·87	1,966·60	271
Mangaldai	Mangaldai	12·72	1·40	...	56·78	116·98	10·09	197·97	23
	Kalaigaon	28·06	2·05	...	60·22	122·52	11·34	224·19	22
	Sipajhar	4·47	0·58	...	50·97	81·03	0·32	137·37	20
	Bengbari	...	0·09	...	46·80	109·82	4·82	161·53	16
	Total	45·25	4·12	...	214·77	430·35	26·57	721·06	81

* No Supervisor Kanungo has been appointed in Pratabgarh, the Patwaris of that area being under the direct supervision of the Sub-Deputy Collector of Karimganj.

APPENDIX I—*concluded.*

Statement showing the area of each Supervisor Kanungo's circle in the cadastrally surveyed portion of the Province—concluded.

Sub-division.	Name of Kanungo's circle.	*Ijáfa Khiraj.*	*Lakhiraj.*	Permanently settled.	*Khiraj* settled.	*Khiraj* unsettled.	Grants.	Total.	Number of mandals' or patwaris' circles.	
		Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.		
Tezpur	Eastern	3·39	0·79	...	70·59	64·21	2·56	141·54	21	
	Western	0·22	0·03	...	26·47	63·19	...	89·91	10	
	Total	3·61	0·82	...	97·06	127·40	2·56	231·45	31	
	Total Darrang	48·86	4·94	...	311·83	557·75	29·13	952·51	112	
Nowgong	Town	1·73	0·76	...	69·69	108·23	1·47	181·88	29	
	Silghat	3·16	2·35	...	58·77	74·60	10·30	148·88	20	
	Doboka	0·12	0·25	...	32·18	79·61	10·69	122·85	18	
	Roha	0·03	0·02	...	41·22	107·50	1·55	150·32	21	
	Dhing	3·49	0·04	...	45·64	119·38	0·40	168·85	22	
	Garua	...	...	...	18·85	109·00	...	127·85	17	
	Ghugua	0·12	0·19	...	29·33	85·56	...	115·70	18	
	Mayang	...	...	...	10·78	82·56	0·83	94·27	10	
	Total	8·65	3·61	...	306·86	766·24	25·24	1,110·60	165	
Golaghat	Northern	0·69	0·41	...	86·52	81·10	21·46	190·18	25	
	Southern	0·20	1·42	...	85·83	52·79	18·23	158·47	21	
	Total	0·89	1·83	...	172·35	133·89	39·69	348·65	46(*a*)	(*a*) Exclusive of 6 mandals of Abatguri.
Jorhat	Eastern	0·55	0·23	...	79·44	65·57	22·19	167·98	19	
	North-Western	0·93	9·00	...	96·76	54·26	35·33	196·28	23	
	South-Western	1·26	5·43	...	69·11	45·60	42·25	163·65	18	
	Majuli	0·03	34·92	...	20·12	94·61	0·68	150·36	19	
	Total	2·77	49·58	...	265·43	260·04	100·45	678·27	79(*b*)	(*b*) Inclusive of 6 mandals of Abatguri.
Sibsagar Sadr	Eastern	0·23	2·91	...	71·37	173·74	39·98	288·23	25	
	Central	0·41	0·51	...	68·78	97·51	12·25	179·49	20	
	Western	0·48	0·19	...	92·90	70·17	40·09	203·83	24	
	Total	1·15	3·61	...	233·05	341·42	92·32	671·55	69	
	Total Sibsagar	4·81	55·02	...	670·83	736·85	232·46	1,698·47	194	
North Lakhimpur	North Lakhimpur	0·37	2·67	...	39·74	2·96	0·51	46·25	20	
Dibrugarh	Chabua	1·27	0·10	...	44·67	45·23	10·95	102·22	14	
	Dibrugarh	0·24	...	...	50·99	27·04	31·23	109·50	15	
	Total	1·51	0·10	...	95·66	72·27	42·18	211·72	29	
	Total Lakhimpur	1·88	2·77	...	135·40	75·23	42·69	257·97	49	

APPENDIX J.

Statement showing Advances and Recoveries on account of Cadastral Survey operations during 1896-97.

District.	Classification of Advances.	Outstanding on the 31st March 1896.	Advances made during 1896-97.	Total for recovery up to the 31st March 1897.	Recovered during the year 1896-97.	Balance outstanding on the 31st March 1897.
1	2	3	4	5	6	7
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Cachar	(1) Advances recoverable from landholders in the areas surveyed by the Professional Party.	31,806 12 10	9,518 10 7	41,325 7 5	96 15 6	41,228 7 11
	Total	31,806 12 10	9,518 10 7	41,325 7 5	96 15 6	41,228 7 11
Sylhet	Pratabgarh— (1) Advances recoverable from landholders in the areas surveyed by the Professional Party.	116 6 10	...	116 6 10	16 6 1	100 0 9
	Jaintia— (1) Advances recoverable from landholders in the areas surveyed by the Professional Party.	15,533 14 5	...	15,533 14 5	15,012 11 2	521 3 3
	(3) Advances for demarcation of grants, permanently settled, and *Lakhiraj* (Revenue free) Estates— (*b*) Prisms . . . (*c*) Pay, etc., of Demarcation Establishment.	283 15 10	...	283 15 10	169 13 2	114 2 8
	Ilam— (2) Advances recoverable from landholders in the areas surveyed by Local Agency.	...	1,450 0 0	1,450 0 0	...	1,450 0 0
	Total	15,934 5 1	1,450 0 0	17,384 5 1	15,198 14 6	2,185 6 7
Goalpara	(1) Advances recoverable from landholders in the areas surveyed by the Professional Party.	127 8 0	...	127 8 0	...	127 8 0
	(2) Advances recoverable from landholders in the areas surveyed by Local Agency.	...	1,674 13 0	1,674 13 0	...	1,674 13 0
	Total	127 8 0	1,674 13 0	1,802 5 0	...	1,802 5 0
Kamrup	(1) Advances recoverable from landholders in the areas surveyed by the Professional Party.	141 8 0	(*a*)345 1 6	486 9 6	141 0 0	345 9 6
	(2) Advances recoverable from landholders in the areas surveyed by Local Agency.	3,298 2 0	2,185 0 0	5,483 2 0	...	5,483 2 0
	(3) Advances for demarcation of grants, permanently settled, *Lakhiraj* and *Nisfchiraj* Estates— (*a*) Concrete blocks . . .	26,910 15 3	653 9 0	27,564 8 3	15 12 0	33,792 10 3
	(*b*) Prisms	5,964 6 0	279 8 0	6,243 14 0		
	(*c*) Pay, etc., of Demarcation Establishment.	618 2 2	693 9 6	1,311 11 8	...	1,311 11 8
	Total	36,933 1 5	4,156 12 0	41,089 13 5	156 12 0	40,933 1 5

(*a*) Of this Rs. 19-12-9 and Rs. 59-13-6 represent advances on account of demarcation of the Theodolite Stations in the Gauhati and Barpeta Towns respectively.

APPENDIX J—*continued.*

Statement showing Advances and Recoveries on account of Cadastral Survey operations during 1896-97—contd.

District.	Classification of Advances.	Outstanding on the 31st March 1896.	Advances made during 1896-97.	Total for recovery up to the 31st March 1897.	Recovered during the year 1896-97.	Balance outstanding on the 31st March 1897.
1	2	2	4	5	6	7
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Darrang	(1) Advances recoverable from landholders in the areas surveyed by the Professional Party.	231 0 3	(a) 1 0 0	232 0 3	36 1 1	195 15 2
	(2) Advances recoverable from landholders *in* the areas surveyed by Local Agency.	187 1 0	90 6 11	277 7 11	...	277 7 11
	(3) Advances for demarcation of grants, permanently settled, *Lakhiraj* and *Nisfkhiraj* Estates—					
	(*a*) Concrete blocks . . .	5,878 10 6	833 4 11	6,711 15 5	27 13 8	6,684 1 9
	(*b*) Prisms	2,308 0 9	188 14 0	2,496 14 9	...	2,496 14 9
	(*c*) Pay, etc., of Demarcation Establishment.	227 10 8	749 7 9	977 2 5	...	977 2 5
	Total .	8,832 7 2	1,863 1 7	10,695 8 9	63 14 9	10,631 10
Nowgong	(1) Advances recoverable from landholders in the areas surveyed by the Professional Party.	2,872 9 9	(*b*) 70 14 0	2,943 7 9	2,444 2 0	499 5 9
	(2) Advances recoverable from landholders in the areas surveyed by Local Agency.	650 13 0	361 8 0	1,012 5 0	...	1,012 5 0
	(3) Advances for demarcation of grants, permanently settled, *Lakhiraj* and *Nisfkhiraj* Estates—					
	(*a*) Concrete blocks . . .	646 14 9	75 14 0	722 12 9	...	722 12 9
	(*b*) Prisms	723 0 9	18 4 0	741 4 9	...	741 4 9
	(*c*) Pay, etc., of Demarcation Establishment.	169 5 5	168 0 0	337 5 5	...	337 5 5
	Total .	5,062 11 8	694 8 0	5,757 3 8	2,444 2 0	3,313 1 8
Sibsagar	(1) Advances recoverable from landholders in the areas surveyed by the Professional Party.	789 2 3	(*c*) 16 5 5	959 1 6	775 15 9	183 1 9
	(2) Advances recoverable from landholders in the areas surveyed by Local Agency.	1,403 2 0	490 2 0	1,893 4 0	...	1,893 4 0
	(3) Advances for demarcation of grants, permanently settled, *Lakhiraj* and *Nisfkhiraj* Estates—					
	(*a*) Concrete blocks . .	8,081 9 5	496 4 0	8,577 13 5	2 8 0	8,575 5 5
	(*b*) Prisms	12,417 3 7	160 9 0	12,577 12 7	...	12,577 12 7
	(*c*) Pay, etc., of Demarcation Establishment.	1,381 5 11	1,927 13 1	3,309 3 0	...	3,309 3 0
	Total .	24,072 7 2	3,244 11 4	27,317 2 6	778 7 9	26,538 10 9

(*a*) Represents advances on account of demarcation of the Theodolite Stations in Tezpur Town.

(*b*) Represents advances on account of demarcation of the Theodolite Stations in Nowgong Town.

(*c*) Of this Rs. 17-10-0, Rs. 13-6-3 and Rs. 133-15-0 represent advances on account of demarcation of the Theodolite Stations in the Golaghat, Jorhat, and Sibsagar Towns, respectively.

APPENDIX J—*concluded.*

Statement showing Advances and Recoveries on account of Cadastral Survey operations during 1896-97—concld.

District.	Classification of Advances.	Outstanding on the 31st March 1896.	Advances made during 1896-97.	Total for recovery up to the 31st March 1897.	Recovered during the year 1896-97.	Balance outstanding on the 31st March 1897.
1	2	3	4	5	6	7
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Lakhimpur	(1) Advances recoverable from landholders in the areas surveyed by the Professional Party.	...	(a) 91 2 0	91 2 0	...	91 2 0
	(2) Advances recoverable from landholders in the areas surveyed by Local Agency.	...	10 8 0	10 8 0	...	10 8 0
	(3) Advances for demarcation of grants, permanently settled, *Lakhiraj* and *Nisfekhiraj* Estates—					
	(a) Concrete blocks . . .	1,468 9 9	1,142 6 6	2,611 0 3	16 0 0	2,595 0 3
	(b) Prisms	368 9 6	143 4 0	511 13 6	...	511 13 6
	(c) Pay, etc., of Demarcation Establishment.	...	51 6 1	51 6 1	...	51 6 1
	Total .	1,837 3 3	1,438 10 7	3,275 13 10	16 0 0	3,259 13 10
Total .	(1) Advances recoverable from landholders in the areas surveyed by the Professional Party.	51,618 14 4	10,196 11 4	61,815 9 8	18,523 3 8	43,292 6 0
	(2) Advances recoverable from landholders in the areas surveyed by Local Agency.	5,539 2 0	6,262 5 11	11,801 7 11	...	11,801 7 11
	(3) Advances for demarcation of grants, permanently settled, *Lakhiraj* and *Nisfekhiraj* Estates—					
	(a) Concrete blocks . . .	42,992 3 8	3,201 6 5	46,193 10 1	231 14 10	74,798 11 3
	(b) Prisms	24,456 4 7	4,380 11 5	28,837 0 0		
	(c) Pay, etc., of Demarcation Establishment.					
	Grand Total .	1,24,606 8 7	24,041 3 1	1,48,647 11 8	18,755 2 6	129,892 9 2

(a) Represents advances on account of demarcation of the Theodolite Stations in Dibrugarh Town.

APPENDIX K.

List of papers communicated to the Agricultural Ledger during the year 1896-97.

Subject.	Description of Paper.
Æschynomene as per a—*Sola-pith* . .	Descriptive note by the Sub-Deputy Collector of Dibrugarh.
Ditto ditto . .	Ditto forwarded by the Deputy Commissioner of Sibsagar.
Ditto ditto . .	Ditto ditto Darrang.
Ditto ditto . .	Ditto ditto Naga Hills.
Ditto ditto . .	Ditto ditto Nowgong.
Aquilaria agallocha—*Agar* or *Sachi* .	Note on the preparation of the Sachi bark as a writing material by Babu Phanidhar Chaliha, Sub-Deputy Collector.
Bixa-Orellana—or the Arnotto (Assamese Jarat or Jolandhar).	Descriptive note by the Sub-Deputy Collector of Dibrugarh.
Ditto ditto . .	Ditto forwarded by the Deputy Commissioner of Goalpara.
Ditto ditto . .	Ditto Deputy Commissioner, Cachar.
Ditto ditto . .	Ditto by Babu Radhakanta Handiqui, Sub-Deputy Collector.
Bœhmeria Nivea—Rhea . . .	Descriptive note by the Sub-Deputy Collector, Dibrugarh.
Ditto . . .	Ditto forwarded by the Deputy Commissioner of Nowgong.
Ditto . . .	Ditto by the Sub-Divisional Officer of South Sylhet.
Ditto . . .	Ditto by Babu Radhakanta Handiqui, Sub-Deputy Collector.
Ditto . . .	Ditto by the Honourable J. Buckingham, C.I.E., Amguri.
Ditto . . .	Ditto forwarded by the Deputy Commissioner of Kamrup.
Cinnamomum Tamala—Tezpat . .	Two Notes by Babu Chandra Kanta Sen, Extra Assistant Commissioner.
Ditto ditto . .	Descriptive note by Babu Girish Chunder Nag, M.A., B.L., Extra Assistant Commissioner.
Coix Lachryma—Job's tears . . .	Descriptive note by Munshi Mashiat Ullah, Sub-Deputy Collector.
Ditto ditto . . .	Ditto forwarded by the Deputy Commissioner, Khasi and Jaintia Hills.
Ditto ditto . . .	Ditto ditto Deputy Commissioner, Darrang.
Ditto ditto . . .	Ditto ditto ditto of Nowgong.
Ditto ditto . . .	Ditto ditto ditto Garo Hills.
Ditto ditto . . .	Ditto ditto Sub-Divisional Officer, South Sylhet.

APPENDIX K—*concluded.*

List of papers communicated to the Agricultural Ledger during the year 1896-97—concluded.

Subject.	Description of Papers.
Coix Lachryma—Job's tears . .	Descriptive note forwarded by the Deputy Commissioner of Sibsagar.
Ditto ditto . . .	Ditto ditto Babu Radhakanta Handiqui, Sub-Deputy Collector.
Ditto ditto . . .	Ditto ditto Deputy Commissioner of Cachar.
Morinda Citrifolia—*Al* dye . . .	Ditto by Munshi Mashiat Ullah, Sub-Deputy Collector.
Ditto ditto . . .	Ditto by Babu Madhab Chundra Bardalai, Extra Assistant Commissioner and Sub-Divisional Officer, Barpeta.
Ditto ditto . . .	Ditto forwarded by the Deputy Commissioner of Nowgong.
Ditto ditto . . .	Ditto by Mr. S. E. Rita, Extra Assistant Commissioner and Sub-Divisional Officer, Jowai.
Ditto ditto . . .	Ditto forwarded by the Deputy Commissioner of Goalpara.
Ditto ditto . . .	Ditto forwarded by the Deputy Commissioner, Naga Hills.

G. I. C. P. O.—No. 45 S. to C. C. Assam—19-11-97—340.—C. H.

Remarks on the Report of the Department of Land Records and Agriculture, Assam, for 1896-97.

It is requested that any reply or future reference to this communication may quote its number, distinguishing letters, and date.

No. 274Agri-R. / 2406

FROM

THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM,

TO

THE DIRECTOR, DEPARTMENT OF LAND RECORDS AND AGRICULTURE, ASSAM.

Shillong, the 24th December 1897.

SIR,

I AM directed to communicate the following remarks of the Chief Commissioner upon your Report on the operations of the Department of Land Records and Agriculture in Assam during the year 1896-97.

2. *Paragraphs* 4-7.—The Provincial Land Records staff was increased during the year by the addition of five Supervisor Kanungos, of whom one was appointed for the Bijni tahsil of the Goalpara district, which was cadastrally surveyed by local agency in 1895-96 and 1896-97, and four were entertained to supervise the work of the newly-appointed *patwaris* in the Cachar district. A staff of 45 *patwaris* was entertained for this district to keep up to date the maps and settlement records of the area of 495 square miles cadastrally surveyed in 1894-95. The staff of mandals in the Assam Valley was reorganised and their position improved, their number being slightly reduced and the pay of the second and third grades being raised.

3. The Chief Commissioner notices that there has been a general improvement in the survey qualifications of mandals, *patwaris*, and candidates, the number of holders, both of first and second-class certificates, having substantially increased. It is unsatisfactory, however, that so large a number of vacancies in the first grade of mandals should remain unfilled owing to the insufficient number of men with first-class certificates. In reviewing your report for the previous year, Sir William Ward remarked that if the large number of vacancies in the first grade was due to the fact that a very high standard of excellence was required for promotion to that grade, it was doubtful if the standard of excellence should be kept so high as to prevent so large a proportion of the vacancies from being filled. You report that these remarks have been borne in mind, but that difficulty has been found in filling up the vacancies in the first grade owing to the fact that the most deserving mandals in the lower grades are often without first-class certificates. As a remedy, you suggest that Deputy Commissioners should depute such men to the survey schools or employ them on extension surveys, in which they may qualify for the necessary certificate. The Chief Commissioner hopes that Heads of Districts will act on your suggestion.

4. *Paragraph* 8.—The Gauhati Survey School continued to do good work during the year. The results of the Jorhat and Dibrugarh Schools are less satisfactory. It is noticed, however, that the Jorhat School succeeded in passing two mandals for first-class certificates, and five mandals, as well as seventeen candidates, for second-class certificates. The Dibrugarh School passed only three mandals and twelve candidates for second-class certificates, and was maintained at a cost of nearly Rs. 31 per pupil passed. The Chief Commissioner has not overlooked the fact, commented on by Sir William Ward in previous years, that this school has special difficulties to contend against, owing to the general incompetence of the mandals in the Lakhimpur district, but he hopes that every effort will be made to obtain better results in future.

5. *Paragraph* 10.—The Chief Commissioner has noticed the excellent work done by Mr. O'Donel, Superintendent of Land Records. Mr. O'Donel was on tour for 314 days in the year, and continued to show great activity and industry in supervising the land records and survey work under his control.

6. *Paragraphs* 11, 12, 15, *and* 16.—The touring and general inspection and testing work performed by Sub-Deputy Collectors was, on the whole, fairly satisfactory. It is noticed that Babu Raj Kumar Rai is specially commended in paragraphs 10 and 15 of the report for the good work done by him during the year. The Commissioner of the Assam Valley Districts and Heads of Districts concerned should note the names of the Sub-Deputy Collectors whose shortcomings are pointed out in these paragraphs, and should require them to show greater activity in future.

7. The work done by Supervisor Kanungos and Surveyors was not altogether satisfactory, and your remarks indicate the necessity for stricter supervision being exercised over them by Sub-Deputy Collectors. The Chief Commissioner agrees with you that it is not creditable to the Sub-Deputy Collector of Mangaldai that all the Supervisor Kanungos in the subdivision should have failed to do a sufficient amount of touring.

8. *Paragraph* 17.—The testing work performed by tahsildars, mauzadars, and tahsil muharrirs was, on the whole, not unsatisfactory; but in the Nowgong, Sibsagar, and Lakhimpur districts, there were certain shortcomings, indicated in the report, which the Heads of Districts concerned should take steps to remedy in future.

9. *Paragraphs* 13 *and* 18.—From the details given in these paragraphs, it seems clear that Deputy Commissioners and Subdivisional Officers, with certain exceptions, have not exercised that supervision over the land records system of their districts which it is their duty to exercise as Heads of Districts and Subdivisions. The attention of District Officers will be invited to the remarks recorded by Sir William Ward in reviewing your report for the previous year, in which reference was made to "the Chief Commissioner's Circular No. 55R., dated the 17th December 1895, communicating to Deputy Commissioners an extract from letter No. 3139—376-1, dated the 29th October 1895, from the Government of India, Revenue and Agricultural Department, in which it was laid down that District Officers are primarily responsible for the proper management of the records of their districts, and that, in respect of this branch of their work, the Director should stand to them in the position of an assistant, not of a substitute."

10. Since the close of the year an Assistant to the Director, Department of Land Records and Agriculture, has been appointed for a period of six years for collecting statistics and making enquiries on certain matters on which information is required in connection with the next re-assessment of the Assam Valley districts, and also to secure continuity of system which might otherwise be endangered by changes in the office of the Director, Department of Land Records and Agriculture.

11. In conclusion, the Chief Commissioner desires me to convey his thanks to you for the energetic and efficient manner in which you have discharged the duties of Director during the year.

I have the honour to be,

SIR,

Your most obedient Servant,

P. G. MELITUS,

Secretary to the Chief Commissioner of Assam.

MEMO. NO. $\frac{274\text{Agri.}}{2407}$ R.

Shillong, the 24th December 1897.

COPY, with a copy of the report, forwarded to the Commissioner, Assam Valley Districts, for information, special attention being invited to paragraphs 3, 6, 8, and 9 of the letter to the Director, Department of Land Records and Agriculture, Assam.

By order of the Chief Commissioner of Assam,

P. G. MELITUS,

Secretary to the Chief Commissioner of Assam.

A. S. P. O. (Rev.) No. 626—390—24-12-97

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